

AD-A174 495

AN EVALUATION OF THE LIMITED CONTRACT WARRANT

1/2

EXPERIMENT AT MARCH AFB(U) AIR FORCE INST OF TECH

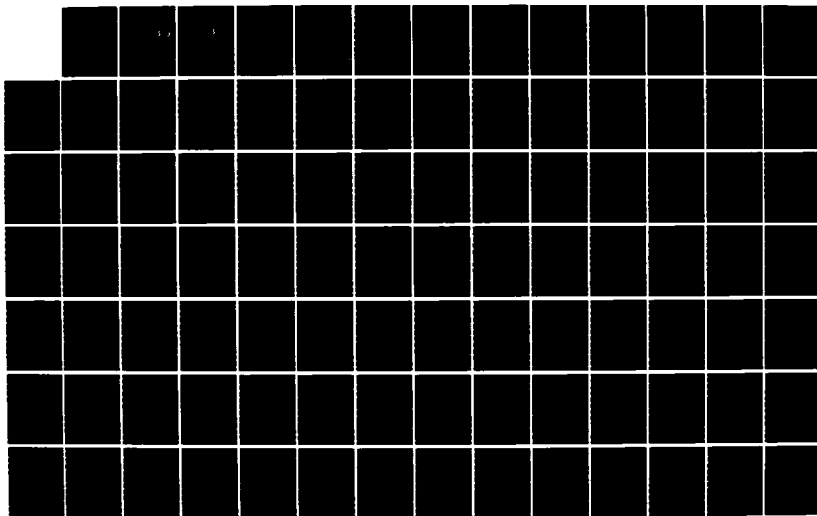
WRIGHT-PATTERSON AFB OH SCHOOL OF SVST.. C H SAGER

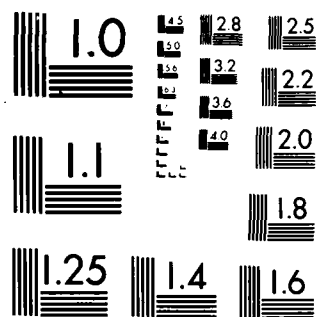
UNCLASSIFIED

SEP 86 AFIT/GLM/LSM/865-70

F/G 15/5

NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963-A

AD-A174 495



DTIC
ELECTRONIC
NOV 28 1986
S D

AN EVALUATION OF THE LIMITED CONTRACT
WARRANT EXPERIMENT AT MARCH AFB

THESIS

Marc M. Sager
Captain, MSC, USAF

AFIT/GLM/LSM/86S-70

DISTRIBUTION STATEMENT A

Approved for public release;
Distribution Unlimited

DEPARTMENT OF THE AIR FORCE

AIR UNIVERSITY

AIR FORCE INSTITUTE OF TECHNOLOGY

Wright-Patterson Air Force Base, Ohio

86 11 25 023

DTIC FILE COPY

2

AFIT/GLM/LSM/86

DTIC
ELECTE
NOV 28 1986
S D

AN EVALUATION OF THE LIMITED CONTRACT
WARRANT EXPERIMENT AT MARCH AFB

THESIS

Marc M. Sager
Captain, MSC, USAF

AFIT/GLM/LSM/86S-70

Approved for public release; distribution unlimited

The contents of the document are technically accurate, and no sensitive items, detrimental ideas, or deleterious information is contained therein. Furthermore, the views expressed in the document are those of the author and do not necessarily reflect the views of the School of Systems and Logistics, the Air University, the United States Air Force, or the Department of Defense.



Accession For	
NTIS CRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution /	
Availability Codes	
Dist	Available for Special
A-1	

AFIT/GLM/LSM/86S-70

**AN EVALUATION OF THE LIMITED CONTRACT
WARRANT EXPERIMENT AT MARCH AFB**

THESIS

**Presented to the Faculty of the School of Systems and Logistics
of the Air Force Institute of Technology**

Air University

**In Partial Fulfillment of the
Requirements for the Degree of
Master of Science in Logistics Management**

Marc M. Sager, B.S., M.S.

Captain, MSC, USAF

September 1986

Approved for public release; distribution unlimited

Acknowledgements

Like Dorothy on her mecca to Oz, I too have had a great deal of help, inspiration, guidance, and encouragement on my trip down the "yellow brick road" to this thesis. I must first thank my wife Nancy not only for putting up with this effort, but with me during the last eight years. To my son Scott who seemed to keep the proper perspective on this thesis effort, and our dog Goliath for being more attuned to our family's needs than I sometimes was.

I want to thank my advisor Major John Campbell for his encouragement throughout, and my reader Major Ron Gruendell whose insights, and experience were not only needed for this thesis, but throughout my year at AFIT. His Superintendant, CMSgt Wirth and the entire medical logistics staff at Medical Center Wright-Patterson have taught me a great deal about a subject I thought I knew.

Special thanks go to the medical logistics and contracting people at SAC Headquarters and March AFB. Captain Bill Hill and Mr. Bill Evans have shown that imaginative and innovative leadership can pay big dividends. To Mr. Don Mantz, 1Lt Groce, Mr. Donald Pierre, Captains Hal Baldwin and Carl Taylor, my thanks for your candidness and cooperation.

Lastly a word of acknowledgement to my sixth grade teacher Mr. Howard Gustafson who said to never expect too much from me academically; hopefully I've proved him wrong.

Table of Contents

	Page
Acknowledgments	ii
List of Figures	v
List of Abbreviations	vi
Abstract	viii
I. Introduction	1
General Issue	1
Specific Issue	2
Research Objectives	3
Scope of Research	4
II. Background	6
Evolution of the Contracting Field	6
Revolutionary War-World War II.....	6
World War II-Present.....	9
Other Applications of Limited Contract Warrants	9
Terms Defined.	11
Small Purchases Defined	11
Local Purchase	12
Simplified Purchasing Methods.....	12
Blanket Purchase Agreement.....	12
Centralized vs. Decentralized Blanket Purchase Agreements.....	13
Blanket Delivery Orders.....	14
Imprest Fund	14
Purchase Order	15
Bulk Funding.	16
Contracting Officer	16
Medical Service Corps	17
Director, Medical Logistics	17
Implications of Executive Order 12352	18

	Page
Small Purchase Procedures	21
Selection of USAF Regional Hospital March	25
III. Methodology	28
Delphi Technique	28
Interview Outline	29
Participants	30
IV. Results and Discussion	33
Question 1. Is there a problem in medical small purchasing?	35
Question 2. Do you think the limited warrant is a viable solution?	41
Question 3. What do you see as the major problem the medical logistics officer will encounter under this program?	47
Question 4. What type of training do you think the medical logistics officer should receive?	58
Question 5. What type of equipment is needed to make this experiment workable?.....	69
V. Conclusions and Recommendations	76
Conclusions	76
Recommendations	82
Recommendation for Further Study	85
Final Thoughts	86
Appendix A: Delphi Letter	87
Appendix B: Delphi Responses	94
Appendix C: Training Outline	102
Bibliography.....	110
Vita.....	117

List of Figures

Figure	Page
1. Production Operations Model.....	22

List of Abbreviations

ACO	Acquisition Contracting Officer
AFB	Air Force Base
AFIT	Air Force Institute of Technology
AFLC	Air Force Logistics Command
AFM	Air Force Manual
AFR	Air Force Regulation
AFSC	Air Force Specialty Code
AFSC	Air Force Systems Command
ALMC	Army Logistics Management Center
AREFW	Air Refueling Wing
ASD	Aeronautical System Division
ASPA	Armed Services Procurement Act
ASPR	Armed Services Procurement Regulation
BCAS	Base Contracting Automated System
BDO	Blanket Delivery Order
BPA	Blanket Purchase Agreement
CIAPS	Customer Integrated Automated Procurement System
CICA	Competition In Contracting Act
CPCM	Certified Professional Contract Manager
DAR	Defense Acquisition Regulation
DBPA	Decentralized Blanket Purchase Agreement
DoD	Department of Defense
DPSC	Defense Personnel Support Center
FAD	Force Activity Designator
FAR	Federal Acquisition Regulation
LP	Local Purchase
MAC	Military Airlift Command
Med Log	Medical Logistics
MMMS-OL	Medical Materiel Managment System - On Line
MSC	Medical Service Corps
NCMA	National Contract Management Association
NCOIC	NonCommisioned Officer In Charge

NSN	National Stock Number
OJT	On the Job Training
PCO	Procuring Contracting Officer
PCS	Permanent Change of Station
RID	Routing Identifier
SAC	Strategic Air Command
SEI	Special Experience Identifier
SF	Standard Form
TCO	Termination Contracting Officer
TIG	The Inspector General
UMMIPS	Uniform Materiel Movement and Issue Priority System
USAF	United States Air Force
Z-100	Zenith corporation microcomputer

Abstract

In October 1985 a limited contract warrant was granted to the Director, Medical Logistics Management at March AFB. This warrant was for all purchases under \$500 per order. By granting contracting authority outside of the 65XX careerfield, Strategic Air Command was breaking with the traditional method of procuring medical items.

This study used a modified Delphi technique to elicit responses from medical logistics and contracting personnel holding parallel positions from Air Staff to base level. The feasibility and limitations of this experiment are discussed and a suggested training outline for medical personnel participating in limited contract warrants is provided.

With over \$128.7 million spent in procurement of medical supplies through local purchase procedures in FY '85, and over 40% of all medical purchases obtained in this manner, there is strong impetus to explore alternatives which may speed up, simplify, or assist the medical treatment facility in obtaining the needed supplies in as timely a manner as possible.

AN EVALUATION OF THE LIMITED CONTRACT WARRANT EXPERIMENT AT MARCH AFB

I. Introduction

General Issue

The timely delivery of medical items is primarily the responsibility of two organizations, medical logistics and base contracting. The needs of the former often clash with the established procedures of the latter. The balancing of the perceived urgency on medical logistics part with the requirement to comply with existing public law and regulations often creates an adversarial relationship. There are a number of causes for this tension, among which is contracting being overwhelmed with a large number of procurement actions involving relatively few dollars. Mr. Bill Evans, Associate Director, Small and Disadvantaged Business Utilization Office at Strategic Air Command (SAC), states that 72% of all contracting actions in that command involve purchase orders totaling less than \$1,000, and these account for only 4.5% of the total dollars expended (23). Statistics for the entire Air Force reflect a similar situation. In FY '85, there were 4.42 million contracting actions at the base-level, of which 3.76 million were for actions totaling less than \$1000.(9: A5) These sub-\$1000 actions accounted for only 8% or \$456 million of the total \$5.7 billion spent at the base-level contracting activities during this same period. (9: A5) A study of 24 bases over a 13 month period conducted by Air Force Logistics Management Center (AFLMC) found that "84.2% of the total number of awards in base contracting were less than \$1000. An even closer analysis of transactions found that 73.4%

were less than \$500...Also, the dollar value of these awards was inverse to the number of awards. In fact, the awards of \$500 were less than 4.5% of the total dollars spent during the 13 month period." (9:44) This indicates that a tremendous amount of effort is expended for a relatively small amount of dollars. According to figures from Air Force Logistics Command (AFLC), for FY '85, there were 20,340 contracting actions for medical items. Of these, 99.3% were for items under \$1,000, and more specifically, 81.9% were for items costing less than \$500. Medical items accounted for only 1.6% of the dollars expended, but over 7.5% of the contracting actions.(8) Besides the small dollar value, the administrative costs in procuring these items are quite high. It is estimated that it costs approximately \$100 to issue a purchase order, regardless of the value of the item procured.(9:44) This is an indirect cost, and is therefore very hard to track. Cognizant of these figures, several efforts were undertaken in SAC to streamline the procurement process, reduce administrative costs, and increase the level of service to contracting's customers.

Specific Issue

The command which has initiated the most far reaching and innovative efforts along these lines is SAC. In October 1985 a Medical Service Corps (MSC) officer, acting as the Director of Medical Logistics, was given contract authority to make purchases of non-depot stocked items whose value was less than \$500 per order through the granting of a limited contract warrant. (23) This experiment generated a great deal of interest throughout the medical and contracting communities. There was strong opinion on both sides of this issue. Proponents saw this as an example of the

decentralization of authority discussed in the book MEGATRENDS by author John Naisbitt. (52) They felt the group most suited to buy medical items was the end user, the medical treatment facility. The supporters also claimed utilizing a limited contract warrant would reduce inventory, lower the number of Priority purchases, increase turn over of stock, and improve the support to the doctors and patients of the medical treatment facility.(46) Opponents felt that medical logistics personnel were not qualified to make contracting decisions due to their lack of expertise and narrow perspective on government purchasing. They also questioned the perceived lack of checks and balances if the medical logistics officer had the authority to order, receive, and certify for payment.(12)

Research Objectives

The thrust of this research looked into the feasibility, practicality, and advisability of pursuing this experiment on a wider basis. An evaluation of the strengths, weaknesses and obstacles which stand in the way of full implementation are reported. As an attachment, a suggested training outline is offered. (See Attachment C)

The investigative questions included:

1. Is there a need for such contract initiatives in the medical small purchase area?
2. Is the limited warrant a viable solution?
3. What has been the prior experience with limited warrants?
4. What contracting procedures will the MSC need to be knowledgeable of when granted the warrant?

5. What type and degree of training should the MSC receive upon being granted a limited warrant?
6. What minimum office configuration is needed to make the experiment feasible?

Scope of the Research

Because of the number of initiatives which were underway in SAC, it was necessary to narrow the focus of this thesis specifically to the limited contract warrant. At USAF Hospitals Pease and Carswell, an experiment was conducted using the Standard Form (SF) 44 as a form of petty-cash fund. In this program, the contracting authority was retained by the contracting officer who granted limited authority to the using activity, in this case medical logistics, to obtain "off the shelf" items which were immediately available at local suppliers. This program not only allowed the medical logistics office personnel to obtain urgently needed items with minimal paperwork, but also there was no lost time incurred by having to walk through an emergency request at contracting. (36) The results at USAF Hospital Pease were very positive. The percentage of purchases made on a Priority basis was reduced from 40.9% in August 1985 to 6.5% in October of the same year. (35) In this program a Standard Form 44 was presented to a vendor for a specific medical item which is either immediately available, or would be available within a short period of time. In lieu of cash, the vendor signed the Standard Form 44, which was processed through accounting and finance for payment. (36) At USAF Hospital Barksdale, a buyer from the contracting office was physically located in the medical logistics office, instead of the traditional geographic separation. Other streamlined procurement alternatives will be discussed as they relate to the limited

warrant program. Certain basic concepts and responsibilities will be explained, and pertinent sections of the respective regulations cited where appropriate.

II. Background

This chapter has five purposes:

- 1. Provide the reader with a look at how the duties, roles, and responsibilities of the contracting officer have evolved since Revolutionary times.**
- 2. Define and discuss certain terms to facilitate the understanding of the roles of both medical logistics and contracting, and the relationship they now share.**
- 3. Special emphasis will be given to the impacts of Executive Order 12352 on reform of the contracting field and its implications on medical purchasing.**
- 4. Discuss small purchase procedures under the traditional system, and how this differs from procedures used at USAF Regional Hospital March.**
- 5. Describe why March AFB was selected as the site for this experiment.**

Evolution of the Contracting Field

Revolutionary Times-World War II. The authority to purchase goods and services on behalf of the government predates the founding of our republic. (13:4) In 1775 the Second Continental Congress authorized a commissary general to procure supplies for the Army. In 1778 the Congress provided that the comissaire would retain two percent of the monies disbursed plus a fixed salary of \$100 per month and six daily rations. More importantly, on the insistance of Thomas Jefferson the comissaire was bonded to act as an agent for the revolutionary government.(13:4) In 1792 the Second Congress authorized the Treasury Department to make all

purchases for the Army. This marked the first formalized delegation of contracting authority by the federal government (13:6). Between 1809 and 1860 several laws were passed which shaped the contracting office which we know today. Among the most important actions taken was the provision for sealed bids, formal advertising, publication of abstracts on bids, and provisions for exception to formal advertising under certain specific circumstances. (13:6) As early as 1845, the Navy department was granted the authority to negotiate for the purchase of medicines.(27:5-13) This exception for medical items existed until the implementation of the Federal Acquisition Regulation in 1984.

On several occasions, the Supreme Court reaffirmed the authority of the contracting officer to enter into contracts on behalf of the government. In 1831 in the landmark decision of U.S. vs. Tingey (30 U.S. 114). The court held:

"We hold a voluntary bond taken by authority of the proper officer of the Treasury Department to whom the disbursement of public monies is entrusted, to secure the fidelity in official duties of a receiver of an agent to disbursing of public monies, is a binding contract between him and his sureties, and the United States, although such bond may not be prescribed or required by any positive law. The right to take such a bond is in our view an incident of the duties belonging to such a department...."(42:2-3)

This decision recognized the right of the contracting officer to act as an authorized agent of the United States government even in the absence of any specific law delegating this authority. It is significant to point out that nowhere in the Constitution is there mention of the contracting activity, or contracting officer. There is no ammendment to the Constituion granting this power, instead it has evolved over the 200 year history of this nation. It has

been left to the Courts to give shape and substance to the contracting role in the absence of legislative definition. In 1898 this authority of the contracting officer was further refined in *Kihlberg vs. United States* 97 U.S. 398. Kihlberg had agreed to haul materiel for the government to the New Mexico territory. The contract provided that he would be paid based on the mileage computed by the quartermaster of the District of New Mexico. After the delivery of the goods, Kihlberg evidently did not feel that the compensation was proper or accurate and sued. The Court found in favor of the government that the quartermaster was acting in the stead of the sovereign and therefore entitled to obligate the government for this payment (33:3-25). Throughout this period, the Supreme Court upheld and broadened the authority of the bonded agent to obligate the government in dealings with private industry. This decentralization of authority was vital to the westward expansion of this nation throughout this period. If every decision and agreement would have had to have been approved in Washington D.C. regarding the shipment of goods in the Dakotas, progress would have been retarded.

In 1893 the Dockery Commission conducted hearings into the procurement practices of the government. They found: 1. no attempt to standardize specifications or quantities, 2. unstable prices, and 3. duplication of functions. (13:7) In 1894 the Dockery Act, an outcome of the hearings, established a Board of Awards and the re-establishment of a single Comptroller of the Treasury. This appeared to be an attempt to consolidate power back in Washington. An example of centralizing decision making without success occurred in 1897 when the Navy Department, disturbed over the high price of armor plating for its ships, set the price at \$300 per

ton. The result was that no suppliers or manufacturers would do business with them. (13:32)

Procurement practices did not change drastically until the Depression, with its numerous federally funded relief efforts.(33:3)

World War II - Present. The Second World War accelerated the growth of government spending in the private sector, with the mass industrialization needed to support the war effort.(33:3) In 1941 the authority for contracting officers to purchase items of under \$500 through simplified procurement procedures was granted by the First War Powers Act. (21:4) Many of the practices begun under the War Powers Act were so effective, that following the war a study was completed by the Acting Secretary of the Navy proposing that they be kept. The study was acted upon by the Senate Committee on Armed Services, which enacted the Armed Services Procurement Act of 1947. The Senate report stated that this bill, "...capitalizes on the lessons learned during wartime purchasing and provides authority, in certain specific and limited categories, for the negotiation of contracts without advertising..". (42:3-13) This act was put into effect through the Armed Services Procurement Regulation (ASPR) and became the basis for all procurement regulations since that date. The present procurement regulations are refinements of this act. In 1976 the Defense Acquisition Regulation (DAR) was implemented, and in 1984 the Federal Acquisition Regulation (FAR) was created.

Other Application of Limited Contract Warrants. The use of limited contracting warrants is not a totally new concept. The idea has been most

commonly used in the areas of nonappropriated funds, specifically the Officer/NCO Clubs, and Commissary. (23) The application and use of this limited warrant has not always been successful. Of most notoriety was the incident which occurred in the Army during the Viet Nam War.

Non-appropriated funds are monies generated and used by military members and their families for the morale and recreation activities. These monies are raised through the Exchange systems, the base movie theaters, and Enlisted, NCO, and Officers Clubs (66:6,8). The club system enjoyed wide latitude to contract and dispense its funds as it saw fit until the late 1960's. In 1969 the United States Senate held hearings on allegations that a substantial amount of money had been skimmed off and taken by a small group of Army NCO's in Germany, and later in Viet Nam. (66). These hearings investigated the laundering of money, and the systematic embezzlement of funds from slot machines in Germany, Fort Benning GA, and Viet Nam. What was apparent to the investigators was the fact that with just a small group of individuals conspiring to circumvent the system a large amount of money could be stolen. According to one of the individuals involved, Sgt. William Higdon, \$400,000 to \$500,000 per year was being skimmed from the slot machine operations in Germany within the 29th Army Division. (67:12). The committee met for 35 days of hearings in 1969 and then reconvened in 1973 for additional hearings. Senator Charles Percy, a member of the subcommittee voiced his indignation of these actions by saying, "What started out as a small band of willful men hell-bent to line their own pockets, ended up, as a result of conscious oversight and command influence, as a rape of the military club system." (67:5)

The policy at that time was to allow the club system to be overseen by a manager who reported to a board of advisors. The manager was responsible for such actions as booking entertainment, and contracting for food and beverages. (66:12) The only time a contracting officer was consulted was when the purchase totalled over \$1,000.(66:16) As a result of this fiasco, the club system procurements were brought directly under the contracting office which then became responsible for booking talent, and developing the best sources for the procurement of food items. (23)

In Military Airlift Command (MAC) a program to evaluate the practicality and advisability of issuing a contract warrant to three commissary officers at Charleston AFB was instituted in June of 1986. The individuals will be responsible for all contracting actions concerning the procurement of items sold within the commissary.(63)

The U.S. Navy presently has a program in which civil engineers are given training in contracting procedures and granted limited warrants.(68) The program is designed for construction engineers who often must work a long distance from their home base and procure construction supplies through local sources. In order to more efficiently utilize personnel, the Navy feels that granting limited contract warrants will allow the engineer to obtain the needed items with the least delay and manpower.(68)

Terms Defined

Small Purchases Defined. The FAR defines small purchases as those whose total is less than \$25,000. (21:6) This was the latest increase which stood at \$500 from 1907-1946, \$1000 under the original provisions of the ASPA in 1947, \$2,500 in 1958, \$10,000 in 1974, and the present \$25,000 in

1982.(21:4) The items which can be purchased through the small purchase procedures would include supplies, nonpersonal services and construction.(21:4)

Purchases over \$25,000 are significantly more complicated and are subject to many more restrictions and requirements.(24:14.1) This thesis effort will not deal with purchases in this category. Purchases under \$25,000 are able to take advantage of many simplified purchase procedures, including: blanket purchase agreements, blanket delivery orders, and imprest funds. (17:16,4-11) The blanket purchase agreements can be centralized or decentralized.

Local Purchase. Medical items are obtained from two basic sources: Defense Personnel Support Center (DPSC) depots and local purchase. Local purchase does not indicate the proximity to the ordering source, but rather the fact that the item is not obtained through one of the depots. Local purchase items are procured for the use of that particular facility and not the Air Force or DoD in general.(21:12) All of the streamlined purchasing techniques discussed in this thesis will be variations of local purchase.

Simplified Purchasing Methods.

Blanket Purchase Agreements(BPA). "A blanket purchase agreement (BPA) is a simplified method of filling anticipated repetitive needs for supplies or services by establishing 'charge accounts' with qualified sources of supply." (24:13.201) The main advantage of a BPA is it reduces the number of purchase orders which must be processed.(24:13.201(b)) Sources of supply on BPAs are rotated in order to

assure competition.(21:63) Blanket purchase agreements are established when there is a broad class of similar items in which the exact items, quantities, and delivery requirements are not known, when they are normally purchased from the same supplier, and when writing numerous purchase orders can be avoided through the use of the BPA(24:13.203-1) The General Store of the nineteenth century illustrates many of the features of the BPA. The store carried most everything the frontier family needed, most people had "charge accounts", and the paperwork was minimal. Our modern day "General Store" could be such places as pharmaceutical houses. Most medical treatment facilities have a number of BPAs established to purchase such items as laboratory supplies. The exact items, quantities, and delivery times vary, but the laboratory can estimate in advance the approximate number of reagents, tests, and controls they will use during the year. Purchases made through the use of BPAs are usually accomplished orally, rather than in writing.(24:13-204). The activity placing the order need only record the date, vendor, items or service, the price, and date the item should be delivered. Locally devised forms or informal memoranda for record can be used to record the transaction.(24:13.204.e.2) The contracting officer is required to review each BPA at least annually, and more often if needed.(24:13.205)

Centralized vs. Decentralized Blanket Purchase Agreements. A

Decentralized Blanket Purchase Agreement (DBPA) differs from a Centralized BPA in the agency having the authority to place orders against it. In a Centralized BPA the authority is located in the contracting office. In order to place a call against a Centralized BPA the using activity must request the

buyer in the contracting office place the order. In a DBPA the authority is decentralized and given to the using activity. There are DBPA's negotiated at DLA as well as the base level. There are over one hundred such agreements at the DLA level for a wide variety of items including x-ray film, magazine subscriptions, and pharmaceuticals. (36) Each of these agreements have been negotiated by a contracting authority at that level who has established prices on all covered items. The using activities, in this case the medical treatment facilities, have the authority to place orders for these specific items with these identified companies without going through the base contracting office for approval.

Blanket Delivery Order. A Blanket Delivery Order (BDO) differs from a BPA in the way it is funded and the manner in which it is used. A BPA is negotiated for specific items from specific vendors based on published prices and estimated usage. A BDO is also for specific items, but specifies how much will be used at a given rate. As an example, dry ice is used in medical laboratories for preservation of tissues to be shipped to other labs. It is often more cost effective to obtain the dry ice from a commercial vendor than make it "in-house". As the using activity knows approximately how much dry ice it will use every week, a BDO can be negotiated for that amount to be delivered weekly without any other ordering actions. The BDO is "front loaded" with funds, meaning that the money for that purpose is ear marked at the beginning of the fiscal year. In a BPA no money is set aside, only an agreement is reached with a vendor for certain items at given prices. As an analogy, a BPA is like a charge account at a store, you have the right to purchase the items from the store, but not

obligated to do so. A BDO is more like ordering the newspaper, you pay ahead of time for a certain product to be delivered at a specified rate at an agreed upon price.

Imprest Fund. An imprest fund is an amount of cash used to purchase needed items on a cash basis.(24:13.401) The present dollar limitation on this fund is \$300 (\$500 in emergencies). These items must be "off-the shelf" type items which are immediately available. These funds may also be used for c.o.d. deliveries.(21:57) Because this method deals with actual cash, the number of controls is substantial. An imprest fund clerk must be appointed, careful track kept of the funds, and a detailed audit trail established. There are some major commands (SAC and AFSC) which feel that the potential for abuse outweighs the benefits derived, and have therefore suspended their use.(36) As described earlier, USAF Hospital Pease and Carswell (both SAC bases) conducted an experiment with a "cashless" imprest fund through the use of the Standard Form 44.

Purchase Order. The purchase order is the most widely used simplified purchase technique. (21:32) Unlike the BPA, BDO, and imprest fund, the purchase order can only be utilized by individuals in the contracting activity. The costs involved in using the purchase order are higher, but it does have certain advantages over the other methods. The purchase order can be used when the amount of money involved exceeds the dollar amount of the imprest fund, when there is no BPA established with the firm in question, or when it is desirable to use a two-party contract.(21:32) The purchase order is accomplished through the use of a DD

1155 which allows full citation of all terms of the purchase. (21:32) While the cost of processing a purchase order can only be approximated as they are administrative in nature, it is estimated to be \$100 per order, regardless of the value of the item(s) purchased. (9:44)

Bulk Funding. Bulk funding is where the contracting officer obtains authorization from accounting and finance to obligate funds against a lump sum set aside for that purpose over a specific period of time.(24:13.101) The forms would be sent through accounting and finance to reserve that amount of money at the beginning of the fiscal year for that purpose. In the medical arena, bulk funding is only used in the procurement of services, not supplies. Medical monies, being separate from the rest of the base's operating accounts are administered differently.

Contracting Officer. A contracting officer is an individual who has received a "Certificate of Appointment" Standard Form (SF) 1402 empowering him to enter into contracts on behalf of the United States Government.(24:1.601) Only a contracting officer can sign contracts on behalf of the government, and then, only within limitations established at the time of his appointment.(24:1.602.1) The authority to act on behalf of the Government is delegated from an agency head, such as the Secretary of the Air Force, who may establish contracting activities.(24:1.601) Selection of the contracting officer should be based on the complexity and dollar value of the acquisition, and the individuals "experience, training, education, business acumen, judgment, character, and reputation."(24:1.603) The warrant to act as a contracting officer can be terminated by reason of

reassignment, termination of employment, or unsatisfactory performance.
(24:1.603-4)

Medical Service Corps. The Medical Service Corps (MSC) officers make up the 90XX Air Force Specialty Code (AFSC). Their primary duties involve those related to health care administration. Within a medical treatment facility, MSCs hold the following positions: Director, Medical Resource Management (RMO); Director, Medical Squadron Section; Director, Patient Affairs; Director, Medical Logistics; and Administrator. Depending on the size of the medical facility, there can be a number of other positions and subspecialization.

Director, Medical Logistics. The medical logistics officer's responsibilities include: procurement, receipt, storage, issue, control, turn-in, disposition, safeguarding, reporting, and accounting for Air Force property(17:1-2(g)(2)); delivering supplies, equipment, and linen to using activities; management of the Medical Dental Stock fund; supervision of the medical equipment program, including maintenance; and, responsibility for overseeing the facility management function. (17:1-2(f)) The contracting responsibilities of the medical logistics officer as outlined in AFR 168-4, include the following functions:

- a. Statement of work (SOW) development .
- b. Quality assurance evaluation, and contract surveillance plans.
- c. Liaison with base and central procurement offices regarding contract services.
- d. Preparation of budgetary input for contract services.

- e. Review of in use SOWs and development of SOW modifications.
- f. Participation in pre-award surveys and pre-bid conferences. (20:9-41)

Implications of Executive Order 12352

In March 1982 President Reagan signed Executive Order 12352 entitled Federal Procurement Reforms. This single document has already had a great impact on how the government does business. There is no reason to think its impact will diminish in the coming years. The Executive Order set out very ambitious goals among which were:

1. To reduce administrative costs and other burdens which the procurement function imposes on the Federal Government and the private sector.
2. Ensure timely satisfaction of mission needs at reasonable prices by establishing criteria to improve the effectiveness of procurement systems.
3. Establish programs to simplify small purchases and minimize paperwork burdens imposed on the private sector, particularly small businesses.
4. Establish clear lines of contracting authority and accountability.

(51:Appendix 1: 1-2)

As a result of this Executive Order several task groups were created to investigate and make recommendations on how to bring into reality the lofty ideals laid out. Of most interest to this subject were Task Group 5 charged with the "Simplification of Small Purchases" and Task Group 6 which looked at "Procurement Career Management Programs". (51:11) The idea of defining

what exactly constitutes a contracting officer and what qualifications this person should possess is not new to Executive Order 12352.

The unpublished report "What a Contracting Officer Is", contains a well developed historical background into the reform efforts in the past century (70). It points out that the "Hoover Commission" in 1955 recommended strengthening the authority and putting more emphasis on improving the qualifications of contracting officers. In 1972 the Congressional Commission on Government Procurement reiterated that conclusion by calling for clarification of the role of the contracting officer. It recommended that the contracting officer be given more latitude in making business judgments.(70) By calling for this increased latitude, the commission recommended that each case be judged separately on its own merits on the lowest level practical. It was thereby calling for the decentralization of the decision making. The Commission also found there was a need for clarification on how authority to make contracts was delegated, and to assure that such authority was exercised by qualified individuals. The Commission's finding led to the establishment of the Federal Acquisition Institute. (70)

Other theses efforts of note in this area are Captain Ficken and Lieutenant Motlong's 1984 effort in evaluating the requirements for warranting administrative contracting officers (25), and Major Robert Ivaniszek's study at Air Command and Staff College, entitled "Increased Contracting Professionalism Standards for Contracting Officers", in which he calls for the development of standards in the contracting field which will clarify its positions as a true profession.(39)

Another effort recommending reform of the contracting careerfield was the study conducted by the Air Force Logistics Management Center at Gunter Air Force Station, in their report COPPER 90 Bringing Base-Level Contracting In the Air Force Into the 21st Century. In the December 1984 report, Brig General Bernard L. Weiss, Director, Contracting and Manufacturing Policy, stated, "COPPER 90 provided a vehicle to focus our vision on the future." (9:cover) The study looked at ways to improve the contracting process and developed seven goals: Wartime Contracting, Improved Use of Technology, Training Personnel, Organization for Productivity, Improve Planning, Enhance Buying, Relations With Customers, Contractors, and Others. (9:viii-ix) Many of the findings and recommendations of this group will be discussed in greater detail in the chapter dealing with the investigative questions stated earlier. The COPPER 90 effort was an innovative, and forward thinking effort by contracting professionals, with inputs from major commands, and private industry.

Another call for improvement in the method in which the government procures its services and supplies appeared in The Inspector General (TIG) Report on Functional Management Inspection Of Effectiveness Of Base-Level Small Purchases Of Materiel and Services Pn 85-615 10 March-26 November 1985. This report was very critical of the small purchasing procedures being used by the bases inspected. The area which came under the most criticism was base contracting's failure to fully utilize the streamlined procurement procedures established in the Federal Acquisition Regulation (FAR). (62:2) The report also focused on initiatives in the medical purchasing area, pointing out problems in overpricing of goods, and making recommendations to rectify this situation (62:12-14)

The legal aspects of small purchase contracting are well documented in the thesis written by Captain G. Keith Roberts a Judge Advocate, in 1982.(58) The thesis details the small purchase procedures from a legal standpoint, and the potential areas of dispute.

Other documents which provide insight into the need for reform in the contracting area include, the Grace Commissions findings in "President's Private Sector Survey on Cost Control",(28), and Hearings on H.R.2545, Defense Procurement Reform Act of 1983.(65)

Small Purchase Procuedures

The Federal Acquisition Regulation (FAR) lists all purchases under \$25,000 as small purchases. (24:13.000) These procurements do not require as much administrative support material and justification for source selction as larger purchases. The particular focus of this effort is on a even smaller subsection of the Small Procurement arena, the sub-\$1000 purchases. In accordance with the FAR, purchases made under this dollar threshhold do not require full competition, only that sources be rotated, and that the price quoted is judged as fair and reasonable. (24:13.106)

Medical logistics is responsible for the procurement of all materiel and services used in the medical treatment facility. It is the focal point of all procurement actions and is the link between the using activity and base contracting. Air Force Manual (AFM) 67-1 Volume V addresses procedures for the scope of activites, and Air Force Regulation (AFR) 167-240 provides specific instructions on how to execute the requests using the proper computer formats.(17, 19)

Medical items are procured from two basic sources, from the Defense Personnel Support Centers (DPSC) or "depots", and those items purchased elsewhere or "local purchase"(LP). AFM 67-1 Volume V defines LP as consisting of a wide variety of items which are either not available through the "depot", or are so urgently needed that requisitioning from them is not practical (17:16.3). Items which are available through the "depot" must be procured through that source. Other items due to their newness, low demand, or because the depot was unable to secure a contract for them, are coded as local purchase. The major difference between purchasing an item LP and "depot" is the inclusion of base contracting in the former. The dollar value of all medical items bought LP in FY '85 was over \$128 million dollars out of a total of \$268 million. (37) Briefly, every item used to treat a patient is procured in the following manner.

Throughout this discussion the Production Operations System Model of inputs, transformation, outputs, and feedback loop will be used. (26:24):

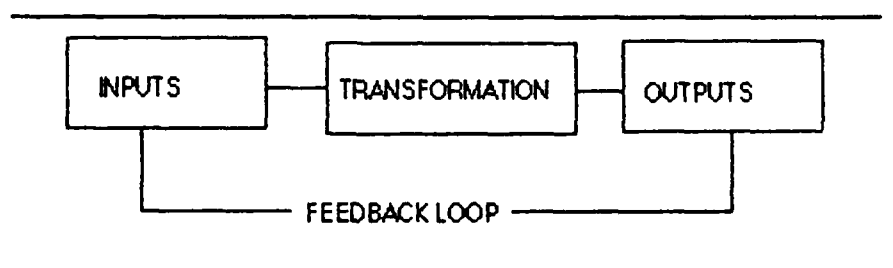


Figure 1. Production Operations Model

Using activities within the medical treatment facility request items on either a routine or "as exception" basis. Items used on a routine basis have a consumption history and stock number assigned. These items have been

identified as either LP or depot so that timely procurement action can be initiated when demanded. "As exception" items must be processed in a manual fashion which requires loading the item into the Medical Materiel Management System (MMMS) in order that the request be processed. All pharmaceutical items used within the facility must receive approval by the Pharmacy and Therapeutics Committee. If the items are purchased local purchase they must also have been approved by the Local Purchase Activity, this can be either a committee or person delegated this responsibility.

(17:16.2f)

Medical logistics processes all orders in a batch method, most accounts running their card decks on a weekly basis. This weekly run is referred to as the "daily". (1:24) This run is the interface between the medical logistics, contracting, and accounting and finance activities. Each activity takes the outputs from this computer run as inputs for other actions. If there is no master record for the item requested, the medical logistics staff will need to create one, this will identify the item for future use, create a backorder, establish a due-in, and a demand for the item. In medical logistics jargon these transactions are an EMR (establish a master record), IDR (establish an identifying record), PBI(create a backorder), ESD(establish a due-in), and AOE (a demand card for a new item), or an AOA card if there is an existing master record on the item(59). The back order generated by the PBI is part of the feedback mechanism which is provided to the requesting section. This notifies them that their request has been received and processed. If the item is listed as being available through the "depot", the requirement is transceived to DPSC in Philadelphia where the request is processed and the item shipped from the nearest depot to the requesting activity.

If the item is LP, the AOE or AOA card is carried over to the base contracting office for processing there. For new items, in addition to the AOE card, base contracting requests two copies of a DD Form 1348-6 Non-NSN Requisition (Manual), a complete description of the item, and a product brochure, if available. These new items are loaded into the Customer Integrated Automated Procurement System (CIAPS). When a demand card is processed from medical logistics for an item available LP and the item is loaded in CIAPS an abstract and solicitation are generated. This abstract contains item description, source of last purchase, price paid, any other sources listed as being able to supply the item, and their price, if known. This abstract comes from the Systems Operations branch and goes to the designated medical buyer if it is a Priority buy or if there is no buy history on the item. If it has been purchased before, or if a suggested source has been provided, the solicitation is mailed directly to the vendor. If there is no response within 14 days, the buy is handled manually by the buyer. The buyer places the calls to the qualified suppliers and obtains a price for the item requested. The buyer can accept the first price offered if he feels it is fair and reasonable. Once the solicitation has been answered and an agreement has been reached regarding price, the buyer annotates the solicitation or abstract which goes back into the CIAPS where a DD Form 1155 is produced. This is the formal offer from the government for the purchase of a specific item in specified quantity at an agreed upon price. (59) The government, at this point, enters into a unilateral contract, in that the supplier indicates the acceptance of the offer by supplying the item in the quantity requested. (58:34) This buyer generally is a GS-4 in the GS 1105 Purchasing Agent career field.(23)

At USAF Regional Hospital March, medical logistics accomplishes these buys without the aid of the CIAPS. Every week the computer generates a Requirements List which is generated by preset re-order points and economic order quantities. New items which do not have inventory levels established on them yet will also appear. The medical logistics officer and one of his staff screen the Requirements List for all Priority items whose price is under \$500. They then manually check the Item Listing provided by the base contracting office to see if there is a buy history and suggested source on the item. If there is, they place a telephone solicitation. If the vendor is able to supply the item at what the buyer feels is a fair and reasonable price, the vendor is notified and a DD Form 1155 is prepared. An electronic typewriter is used to generate the DD Form 1155, but all other functions are performed manually.(3)

Selection of USAF Regional Hospital March

USAF Regional Hospital March is a 120 bed facility located at March AFB California. The experiment was originally scheduled to be implemented at USAF Regional Hospital Erhling Berquist located at Offutt AFB, Nebraska but due to difficulties in working out all of the support details, it was shifted to March AFB. (23) In a letter dated 5 April 1985, Colonel R. A. Miles, Director of Contracting at SAC Headquarters notified contracting and USAF Regional Hospital March that they had been selected as the test site for the limited warrant experiment. (46) In his letter Colonel Miles stated , "Because of the wide latitude in implementation, the drastic change in methodology, and most important a need to cooperate and communicate, March was deemed to be the most feasible base to conduct the test." (45) Captain

Taylor, the Director of Medical Logistics at that time, said that in July 1985 he received a call from Captain William Hill, Director of Medical Logistics at SAC Headquarters, that the limited warrant would soon arrive and to begin making purchases.(61) The official dates of the experiment were to be from 1 October 1985 through 31 March 1986. (73) In a 23 September 1985 letter, Colonel Young, Director, Health Services Administration, Office of the Surgeon General at SAC Headquarters, requested that the following information be forwarded to SAC Headquarters on a monthly basis:

- a. Contract administrative lead time
- b. Local purchase priority requisition rate
- c. Vendor delinquency
- d. Support to providers, patients, and other support activities within the medical facility
- e. Inventory (on-hand) changes
- f. Stock fund expenditures
- g. Medical logistics and base contracting office problems/benefits
- h. Local procedures which were developed to support the test program
- i. Any other comments and recommendations applicable to the program (73)

The actual appointment was completed on 21 June 1985 with the issuance of the Contracting Officer Appointment Certificate(SAC-85-138). (47) Initial training was completed in September and the program was officially begun. More discussion of the type and extent of training can be found in Chapters 4 and 5. In October 1985 Captain Taylor received PCS

orders and the experiment was put on hold until his replacement Captain Hal Baldwin could arrive and be issued another warrant. The experiment was suspended as of 31 October 1985. (48) In January 1986 the evaluation period was extended from 30 March to 30 June 1986. (49) Captain Baldwin received his warrant in late March 1986 and the experiment was resumed at that time. (3) Mr. Donald Mantz, Deputy Chief of Contracting, 22 AREFW, March AFB, said that they had agreed to take part in this experiment, not because they felt that there was a problem in medical small purchasing, but because he thought the experiment sounded interesting and worth closer investigation. (43) It is with this background that the interviews and discussion can now be reviewed.

III. Methodology

Delphi Technique

The method utilized was a modified Delphi technique. The Delphi approach was selected because, as noted in the 1969 RAND Corporation study, "The Delphi technique is a method of eliciting and refining group judgments. The rationale for the procedures is primarily the age-old adage 'Two heads are better than one', when the issue is one where exact knowledge is not available" (14:v). In this instance the subject of limited contract warrants is not well developed or utilized throughout the Air Force. By soliciting information, opinion, and insights from a variety of individuals at various levels of command, a broad spectrum of experience and knowledge was tapped. The geographical separation of the individuals solicited, Washington DC, San Antonio TX, Omaha NE, Riverside CA, and Dayton OH, made this technique a practical and useful method.

To gain inputs from base, command, and Air Staff levels the Delphi technique was well suited. It was felt that individuals at the lower command levels might be influenced in their responses if they knew what their superiors had said. One of the virtues of this technique is that it "minimized the biasing effects of dominant individuals, of irrelevant communications, and of group pressure towards conformity". (14:v) Each of the individuals selected was highly qualified in their respective fields, and levels. The Delphi technique is an effective way of eliciting the inputs from the "cream" in a direct, efficient manner. (14:16)

In this case, the technique was modified in that there was no attempt to reach a consensus, only solicitation of opinion of knowledgeable

individuals in the medical logistics and contracting fields regarding this experiment. The individuals at the Air Staff level, Colonel Jack McChesney, Chief, Contract Placement Division, Directorate, Contracting & Manufacturing Policy, and Colonel Charles Harsanyi, Chief of Medical Logistics, Office of the Surgeon General, were contacted by mail. A list of interview questions was prepared for each and mailed in January 1986. Each list was modified slightly in order to solicit information from their individual perspectives.

Interview Outline

The basic format of all interviews revolved around five basic questions:

1. Is there a problem in medical small purchasing?
2. If so, is granting a limited contract warrant to a Medical Service Corps officer a viable solution?
3. What do you see as the major problems the medical logistics officer will encounter under this program?
4. What type of training do you think the medical logistics officer should receive?
5. What type of equipment is needed to make this experiment workable?

Based on their responses, separate interview question formats were prepared for all subsequent discussions. One of the research objectives was to see if there was a consensus of opinion within the medical or contracting fields. Did the people at the base and command levels reflect the views of the individuals at the Air Staff level? Personal interviews were set up with individuals holding parallel positions in the medical logistics and contract

fields at Strategic Air Command (SAC), March AFB, and Wright-Patterson AFB. Interviews were also conducted with a representative from Air Force Logistics Command (AFLC) medical logistics, and the Air Force Institute of Technology (AFIT) faculty. The technique used was to contact the individual involved at least five workdays prior to the interview with the list of the basic issues to be discussed. Notes were taken during the interview, which were typed up and sent back to the interviewee for validation. The respondents were encouraged at this time to modify, clarify, expand, or expound on any of the points covered. These validated interviews became the basis of all responses used in this effort. Interviews were concluded in March 1986. While some of the individuals were only contacted at the time of the original interview, others, especially those at March AFB and SAC Headquarters, were contacted by telephone several times. Because of the evolving nature of this experiment, follow-up phone calls were made well into the summer months of 1986.

Participants

The following is a list of the individuals and the positions they held at the time of the interview:

SAC Headquarters:

Captain William Hill, Chief, Medical Logistic Division, Office of the Surgeon General

Mr. Bill Evans, Associate Director, Small and Disadvantaged Business Utilization

March AFB

USAF Regional Hospital March:

Captain Carl Taylor, Director Medical Equipment Management Office, and former Director, Medical Logistics Management at the inception of the experiment

Captain Hal Baldwin, Director, Medical Logistics Management

22 AREFW Contracting:

Mr. Donald Mantz, Deputy Chief of Contracting

1Lt. Lydia Groce, Chief, Systems Management Branch

Mr. Donald Pierre, Chief, Supply Branch

AFLC Headquarters:

Major Gerald Rep, Director, Medical Logistics and Services

Wright-Patterson Contracting Center:

Mr. Claude Crabtree, Chief, Services Branch

Wright-Patterson Medical Center:

Major Ronald Gruendell, Director, Medical Logistics Management

AFIT:

Lt. Col. Gary Delaney, Contracting & Manufacturing Option Manager, School of Systems and Logistics (AU)

In April 1986 the last of the validations were returned. The responses to the five basic questions were then taken as a composite. All responses to question number 1 were listed without reference to the individual who provided it. The same was done for the remaining four questions. (See Appendix A) These responses were then mailed out to the above named individuals to see if there had been any change or modification in their position on these questions, and if reading what others had to say on the same issue, had any influence. These were mailed in late April and the

last response was received in late June. (See Appendix B) The delays can be attributed to the PCS of two of the individuals originally interviewed.

Consideration had been given to the use of a survey technique, but this was ruled out. Due to the newness of the program, most contracting and medical logistics officers did not have sufficient experience or knowledge of the specifics of the program to offer an educated opinion. In order to conduct a survey some amount of orientation to the issues would have been required before soliciting opinions. It would have therefore been difficult to determine if the survey was reflecting the respondents opinion or effects of the orientation.

IV. Results and Discussion

This chapter presents the results of the interviews conducted from January through March 1986, and the subsequent Delphi mailing which was completed and validated in June 1986. The format of presentation will be to report the responses to the five core questions and discuss these results. Not every individual answered exactly the same question. At March AFB, the Base Contracting interview was done in a group setting with Mr. Donald Mantz, 1Lt. Lydia Groce, Mr. Donald Pierre, TSgt Brown, TSgt Blomquist, and SSgt Romero in attendance. The interviews at medical logistics were conducted over a two day period with Captains Hal Baldwin and Carl Taylor interviewed both together and separately. The format will be to present the Delphi responses with additional comments which were provided in the original interviews. Because the use of limited warrants was so new, there were no right or wrong answer on any of these questions. The goal was to solicit responses from informed individuals in the contracting and medical logistics career fields holding parallel positions from Air Staff through base level. The candor and openness of the responses is evident, as well as the thoughtfulness and insights from all of the participants.

As a quick reference, here is a list of the individuals interviewed and the positions they held at that time:

Air Staff Level

Colonel Charles Harsanyi- Chief of Medical Logistics, Office of the Surgeon General

Colonel Jack McChesney- Chief, Contract Placement Division, Directorate, Contracting & Manufacturing Policy

SAC Headquarters

Mr. Bill Evans-Associate Director, Small and Disadvantaged Business

Utilization

Captain William Hill-Chief, Medical Logistics Division, Office of the Surgeon

General

March AFB

USAF Regional Hospital March

**Captain Carl Taylor-Director Medical Equipment Management Office, and
former Director, Medical Logistics Management at the inception of the
experiment**

Captain Hal Baldwin- Director, Medical Logistics Management

22 AREFW Contracting

Mr. Donald Mantz- Deputy Chief of Contracting

Mr. Donald Pierre-Chief, Supply Branch

1Lt. Lydia Groce- Chief, Systems Management Branch

Medical Center Wright-Patterson

Major Ronald Gruendell-Director, Medical Logistics Management

Wright-Patterson Contracting Center

Mr. Claude Crabtree- Chief, Services Branch

AFLC Headquarters

Major Gerald Rep- Director, Medical Logistics and Services

AFIT

**Lt. Col. Gary Delaney- Contracting & Manufacturing Option Manager, School of
Systems and Logistics**

Question 1. Is there a problem in medical small purchasing?

Colonel Harsanyi-Yes. We view the problem differently; contracting from the workload standpoint and the customer from the order to receipt time.

Colonel McChesney-There is a problem in purchasing but it is not unique to medical items. We are hamstrung by regulation from Congress that slows the process. Most of these regulations are necessary because we are spending the public's money, and they want accountability. Unfortunately this all works to slow service on all commodities.

Mr. Evans-Yes. The contract lead time is much too long and the medical buyer in contracting generally does not know the item being bought. There has to be a better way to buy small purchases.

Captain Hill-Yes. Medical buying is very different from other base functions, and while there are public laws which must be adhered to, the medical buyer in the base contracting office is not fully aware or "sensitive" to these unique needs. Most base contracting activities cannot adequately support medical supply/equipment acquisition needs thus necessitating the limited warrant program.

Captain Taylor- The only problem I see is in the area of Priority purchases. Sometimes it takes too long.

Captain Baldwin-Yes. Contracting can't get the item to us in a reasonable time. Ordering direct from the manufacturer has saved us time and money.

Mr. Mantz-No. If medical personnel would process their requirements in a timely manner and establish stock levels, the contracting division then could establish requirements controls, and other methods for timely support.

Mr. Pierre- Yes. Inflated Priority rates is a continuing problem and lack of good commercial descriptions. Increased use of depot could establish a better more uniform flow of medicines. Blanket approval to purchase direct from large businesses without competition would be a definite plus for all concerned.

1Lt Groce- No. The medical buyer at March is not the least experienced. Great pains are taken to be sure that turnover of personnel does not affect the Hospital because of their mission. Workload is heavy all over the Air Force. The Hospital sets their own priority rates which determine lead times. The Hospital is given a lot of freedom to determine the exact item needed.

Major Gruendell- Yes there is a serious problem in small purchasing. Contracting is not responsive enough. Lead times are too long; 70 - 90 day lead time on new items is too long.

Mr. Crabtree-No(Mr. Crabtree's response during the interview was that there was not a problem. There was a large volume and indeed a backlog, but the situation was not out of hand.(12))

Major Rep-Yes. The problem may be alleviated by recent initiatives in SAC with the limited warrant.

Lt Col Delaney-Yes, the volume of actions and inexperience of supply buyers and lack of knowledge of the medical nature of the requirement.

Discussion: The problem, if one exists, seems to go beyond the narrow perspective of medical purchasing. Except for Mr. Mantz and Mr. Crabtree, all participants see a problem in the area of small purchasing. The Department of Defense (DoD) and the government as a whole perceive that the simplification and reform of small purchase procedures is a worthwhile goal. Task Group 5, a direct result of Executive Order 12352, was chartered

to recommend ways of simplifying the small purchasing activities. (50) In their executive summary, the group notes, "Perhaps in the small purchase arena, as nowhere else, the opportunity to achieve the stated goal of Section 1 (e) of Executive order 12352 exists...The gross number reported is in excess of eighteen million or stated another way, two small purchases are made every second of the workday throughout the year." (50:iv) While small purchasing covers all transactions up to \$25,000, the average Federal small purchase is only \$659. (50:iv)

The responses from the medical logistics individuals indicated unanimous feeling that the length of time from requesting the item to its receipt was too long. Contracting refers to this period as the Contract Lead Time. Until 1985 Contract Lead Time was a report collected at the command level and forwarded to HQ USAF, this is no longer done. (23) The report can be requested on a base by base manner. At Wright-Patterson AFB the medical logistics office routinely requests this report monthly.(30) In his response, Major Gruendell refers to having to wait 70-90 days for new items requested on a Routine priority basis. This is corroborated by the Contract Lead Time summary for the month of February 1986 when the total lead time for Routine items was 73.3 days from Requisition Date to Actual Delivery Date(72) The response from Colonel Harsanyi points out a salient fact, contracting regards the lead time from the time they receive the demand until an award is made, but the medical logisitcs community views this period extending until the item is actually received. In discussing lead time it was always necessary to keep in mind how each group viewed it. During the initial interviews at March AFB, 1Lt Groce stated that the Contract Lead Time at that base for medical items was 19 days (29), when Captain

Baldwin was asked about this the next morning he seemed surprised at this figure as his records showed lead times in excess of 45 days.(3) The discrepancy was finally resolved when it was realized that contracting viewed that the critical part of lead time ended when the award was made, and medical logistics not until the item was actually available for the patient. According to a letter dated 12 March 1986 from Harry G. Hall, Deputy Director Of Contracting at SAC Headquarters, the average lead time for Priority 09-15 (Routine) at March AFB was 15.40 days and for SAC as a whole 22.55 days for Fiscal Year (FY) '85.(31) These figures represent only that portion of the time that contracting deals directly with the request, the date received to the award date.

Local purchase (LP) is a large part of the total medical purchasing activity. In 1985 SAC had an average LP rate of 43.4%. (41) Local purchase is composed of those items not provided through the Defense Personnel Support Center (DPSC) depot system and involve the the contracting office in their procurement. Although not an ironclad rule, the tendency is for larger medical treatment facilities to have a higher local purchase rate than smaller ones. This is due in part to the type and extent of treatment provided. The smaller clinics and hospitals refer their more complicated and difficult cases on to the larger regional hospitals, and medical centers. These facilities, because of the specialized care, often have unusual requirements, or ones of such low quantity that it would not be economical to stock the item through the depot system. At Medical Center Wright-Patterson a local purchase rate of 63% in a single month is not unusual. (30) In SAC the five regional hospitals located at Minot AFB, Carswell AFB, March AFB, Barksdale AFB and Offutt AFB had an LP rate of 48.84%, nearly 5 % higher than the command

average.(41) Of the regional facilities, USAF Regional Hospital March had the lowest LP rate with 41.6% compared with 54.4% at Minot. (41)

Another indicator that a problem may exist is the Priority rate used by the ordering activities. All procurements are assigned a Priority rating based on the urgency of need and type of mission being supported.(69) Each activity is assigned a Force Activity Designator (FAD) based on their mission. Those involved in direct support of high urgency missions such as the Rapid Deployment Force would have the highest ratings, other activities such as Morale, Welfare and Recreation would have a lower rating. Within each FAD there is a range of Priorities under which items can be requisitioned. By utilizing these ratings the Depots know which requests must be filled first. The ranges for Emergency, Priority, and Routine requests vary according to the FAD. (69) Most medical facilities in peace time are in a FAD III.(69) Every order placed by the medical facility is assigned a priority rating based on how soon the item is needed. Ratings are 1-3 for Emergency requisitions, 4-8 for Priority, and 9-15 for Routine.(69) These ratings are important to contracting as well, as they affect the number of days of lead time allowed before award. An Emergency buy must be awarded in 5 days, a Priority in 9, and a Routine in 40.(59) Contracting must manually process all requisitions above Routine. This disrupts the flow of work and pushes back all other requisitions until these higher priority ones are accomplished. An ongoing concern of medical logistics, and especially contracting, is inflation of priority ratings. (43) When everything becomes a Priority, how can you tell the real priorities from the inflated one? Medical logistics, while acknowledging this, counters with the argument that if the only way you can get what you need when you need it is to code the request Priority, what

alternative is there?(36) One of the measures of the contracting activities efficiency is the Priority rate. While there is no standard, the lower the priority rating the better. The low rating would indicate that items are procured in such a manner such that economic order quantities can be built to ensure no stock outs or shortages. The Priority rate for March AFB in the 1st Quarter FY '86 was 16.36% down from 22.55% the year before.(41) The average for all of SAC was 16.37% for this same period. (41) Of the bases with regional hospitals, March AFB rated the best with Barksdale second at 16.91%, Offutt at 18.64%, Carswell at 16.53%, and Minot at 20.75%.(41) What must be kept in mind when viewing these figures is that these are base-wide results and not specific to medical purchasing. The figures for the medical activities are contained in the Base Contracting Activity Report which is consolidated at command headquarters, but not forwarded to HQ USAF. Figures which were collected at March AFB show that for the same 1st Quarter in which the base average was 16.36% the Medical Priority rate was 37.07%, over twice as high. (29) The Priority rate for all SAC medical facilities in FY'86 was 41.69% (36) The figures from Air Force Logistics Command indicate a similar situation, through the 4th Quarter of FY '85, the medical Priority rate was 40.41% commandwide.(8) The overall Priority rate for all purchasing commandwide was 32.71% (8)

The comments regarding the level of training and experience of the medical buyers will be developed in the question dealing with the level of training required.

Question 2. Do you think the limited warrant is a viable solution?

Colonel Harsanyi-After reviewing the responses, two things become clear. Contracting is not eager to pass the authority and we are a bit too eager to accept the additional workload. As mentioned in our first response, decentralizing the medical buyer is probably a more workable solution.

Colonel McChesney-Perhaps it may help. Worth a try.

Mr. Evans-The limited warrant is the best of the alternative methods in dealing with the medical supply small purchase problem. As long as the warrant is limited to under \$1000, training is minimal and little acquisition difficulty experienced.

Captain Hill-Yes. However, the medical logistics officer should not use the limited warrant to circumvent already established purchasing procedures... I feel that when appropriately used, the limited warrant program is an excellent supplement to the procurement system.

Captain Taylor-Yes. By allowing the logistics officer a limited warrant, his section could make the priority purchases much quicker than base contracting.

Captain Baldwin-The limited warrant is the best alternative. The only drawback is the increased administrative requirements. To make the program work we need at least two people assigned. We will never be able to buy all requirements under \$500 at a facility this size(120 bed). I feel our buying Priorities will have a ripple effect. It will reduce contracting's work load letting them work on the Routine items.

Mr. Mantz-No, I have seen this done in the past and it caused more problems and it's just one more area to monitor for violations of law and fraud.

Mr. Pierre- It could be if the personnel are properly trained to avoid illegal acts. Education in buying practices is essential and some type of automated system must be developed.

1Lt Groce- Yes, if used on Priority items only, it will expedite service to the Hospital and reduce a high priority rate at the base level.

Major Gruendell-There are other methods to accomplish our requisitioning; decentralized BPA's, and BDO's, petty cash, base contracting, and limited warrants. Each has its advantages and disadvantages. Limited warrants eventually will become an accepted part of medical logistics.

Mr. Crabtree-No.

Major Rep-Most assuredly.

Lt Col Delaney-Yes, with appropriate contracting office assistance and oversight.

Discussion: The granting of a limited contracting warrant is another manifestation of the decentralization of contracting authority which has taken place over the past several years. Major Gruendell in his response talks about several other options available; Blanket Purchase Agreements (BPA), Blanket Delivery Orders (BDO), and petty cash. BPA's are used when certain items are only ordered from a specific company. There are a large number of decentralized blanket purchase agreements which have been negotiated by HQ USAF which all base medical activities can utilize. There is no indication that the number of DBPA's will decline in the near future. (36)

Perhaps the strongest advocate for the limited contract warrant program is Mr. Bill Evans, Associate Director of Small and Disadvantaged Business Utilization at SAC Headquarters. During the initial interviews, a majority of the interview focused on what was the motivation behind this experiment and why had medical logistics been selected. He spoke about the uniqueness of the medical requirements as well as the structure of medical administration. Where the rest of the base uses separate organizations for ordering, receiving, and issuing supplies, medical logistics handles all of these. With the money for running the hospital not being part of the general base fund, it gives the medical facility a great deal of independence and flexibility in determining its needs and controlling its resources.(23) Mr. Evans also spoke about the unique mission of the health facilities and the urgency of need for many of the items. When asked how he would go about "selling" the idea of the limited warrant to his base contracting officer if he was the medical logistics officer, he replied:

" The Med Log officer should have little problem selling the program as long as he does it in terms of the benefits to the contracting office, and not on the good it will do in the hospital. Everyone understands his own position best, so sell it on those terms. If I were a contracting officer and someone came in and said he could reduce my workload, reduce my Priority rate, and allow me to use my people to buy other things I would be thrilled. Med Log has to overcome the negative first perceptions that the contracting officer may have when they first broach this subject." (23)

Captain Hill pointed out that while the SF 44 program would depend on the proximity of local sources of supply, the limited warrant would be equally applicable at all facilities.(36) The Standard Form 44 can be used as a form of petty cash for emergency purchases at nearby sources which can readily

supply the needed item. Major Gruendell said he saw the Limited Warrant as inevitable given the trend towards decentralization of authority throughout the Air Force, as well as society as a whole.(30) He saw the positive aspects of the program as its ability for providing better service to the "customers", removing a layer of administration necessary to make a purchase, and perhaps buying items more efficiently. He warned though, "I think in a sense, we are saying that we can do the buying function better than contracting; I'm not sure we actually can." (30)

Those who felt the strongest that this was not a viable solution were Mr. Mantz and Mr. Crabtree. Mr. Mantz during the initial interview in March 1986 stated:

"I do not think that satelliting is the answer...I really think this is just another swing of the pendulum. In 1957 we satellited the contracting authority to different activities, and we will find now what we found then, that the way to avoid problems with unauthorized purchases is to centralize the contracting authority in the contracting office. One office, one focal point....One of the benefits (of this program) will be that medical logistics will realize that they have no right to scream about the service they get from contracting. I don't think it is a problem in medical logistics, but more rightfully in the management of the hospitals. The doctors are very demanding of the specific items they will use and want. Sometimes they are brand name specific on items when generics will do. The management of the hospitals seem to support the doctors every demand." (43)

Mr. Crabtree, Chief of the Supply Branch at the Wright-Patterson Contracting Center, in his interview strongly felt that granting the limited warrant was not only not a practical solution, but an insult to the buyers in contracting who had been doing this type of work for many years and had never been considered for being granted a warrant. He saw the granting of the warrant in this defacto manner as a cheapening of the warrants which he

and other contracting officers had earned by means of experience and formal training. (13) Several contracting people interviewed, Mr. Mantz, Mr. Crabtree, and Mr. Evans, made the point that contracting personnel felt very proud of their career field and that granting the warrant in this manner could cause negative feelings. The analogy they all brought up was; how would medical logistics officers feel if a contracting officer was given a one day orientation and then authorized to wear the Medical Service Corps pin? It seemed that the granting of the warrant was the biggest obstacle in making this idea a practical solution. The warrant itself was an emotional subject that was never far out of the thoughts of the contracting personnel interviewed. Major Gruendell in the initial interview stated that he felt that only those who were naive would desire a contract warrant. (30) The advantages of having the warrant had to be balanced against the increased workload, responsibility, and risks involved. He made the point that while the warrant would certainly help the medical logistics community procure the items they needed in a more timely manner, it also meant that they were now assuming a responsibility which was not their's; that of buying. Major Gruendell stated that "The administrative workload that we already have would increase. We already earn more manpower positions than can be funded, and this would make it worse. We presently have the extra work that the BPA and BDO's generate... We (the Medical Service Corps) are naive enough to think we can handle it (limited warrants) so we will accept it. It was the same thing when they first introduced the idea of BPA's We will learn to live with it. Probably the people who do not know what additional work it will entail, will welcome it." (30) SMSgt Cox the Superintendent of Medical Logistics at March AFB felt strongly on the advisability of continuing

this experiment. When asked if he would recommend this program continue, he replied, "To be honest with you, no. It is too high a price to pay to implement the program, both in personnel and morale. When we were in the program full time, the morale was very low. There was not much return for the amount of effort expended. If we could go on-line with contracting then maybe it would be worth it. I really think SAC Headquarters has an unrealistic perspective on the value of the program" (11) When asked during the interviews in March, to assign the program a letter grade, Captain Baldwin and 1Lt Groce agreed it was at best a "C", and if limited to Priority purchases only a "B+". (3,29)

Several people were asked if the limited warrant should be given to every medical logistics officer or should there be some sort of prerequisites? Captain Taylor felt that the warrant should only be granted to a medical logistics officer with one year experience(61), Major Gruendell felt that it should be a joint assessment from the contracting and medical logistics functions at command level to determine which medical logistics officer was ready for this responsibility. (30) Colonel Harsanyi stated that by virtue of holding the Air Force Specialty Code (AFSC) it must be assumed that the individual was qualified to assume this position, and that no special qualification was necessary other than training. (34)

Most of the individuals were asked if they would take the warrant if it were offered to them. Here the answers seemed to vary between and within career fields. Major Rep felt very strongly that he would welcome the warrant, and felt those who would not were the ones fearful of venturing into the unknown.(57) Captain Taylor and Captain Baldwin both felt that they would again accept the warrant if offered, but Capt Baldwin said he

would limit to Priority purchases only.(3) Major Gruendell said, "I would probably take it, but only after looking hard and long at it. I would probably start slow and build. I would want to see how much I could automate, and how much I could absorb. I wouldn't jump into it immediately." (30) Mr. Pierre felt that he would turn it down. He stated, " Having someone I can blame for disapproval of sole source purchases would protect me from coercion to make illegal transactions...If they gave a Special Experience Identifier (SEI) for medical purchasing then I would support assigning a buyer to the hospital." (54) Lt. Groce said she would "take it because I feel I could give my customers the best service by using it. The Hospital and its customers are familiar with the sources and the items to be purchased." (29)

Question 3. What do you see as the major problem the medical logistics officer will encounter under this program?

Colonel Harsanyi-We do not see a problem with lines of authority as outlined in other responses. We know of very few hospitals in the private sector who do not have responsibility for requisitioning, purchasing, receiving, and paying. However, we are not familiar with many contracting officers who buy everything from drugs to generators in the private sector.

Colonel McChesney- Stay with original reponse ("Who will the MSC Contracting officer work for? You realize that both in government and private sector, the functions of requisitioning, purchasing, receiving, and paying are generally separated. This is done to preserve fiscal integrity, yet MSC warrants would combine all these functions except for paying. Given the chain of command structure of the typical MSC, will the MSC give first loyalty to his warrant or to his boss should the interest of the two conflict")

Mr. Evans-Resistance to change is the major problem. After that is overcome the rest will fall in place. Training of the Med Log officer would not be a problem.

Captain Hill- Adequate training to become properly acquainted with the "do's" and "don'ts" of the procurement process.

Captain Taylor-Having adequate personnel to place orders, plus establishing a data base.

Captain Baldwin- Time, workload, lack of automation are the drawbacks.

Mr. Mantz- Keeping up with the workload, determining pricing fair and reasonableness, and saying no to the boss' pressure.

Mr. Pierre- Lack of manpower, along with a lack of an automated system. Development of adequate controls to insure compliance with FAR must be of primary concern. Education of the medical logistics officer and his buyer is paramount. Perhaps a two month training of all medical logistics personnel would reveal many of the problems and processes.

1Lt Groce- Several - he will have to become familiar with contracting laws and regulation; workload will increase; no adequate way to control/monitor Hospital purchasing to ensure compliance with regulations.

Major Gruendell- The major obstacle will be the lack of confidence contracting people have in us. Unless we learn how to do it well, we will merit their lack of confidence.

Mr. Crabtree-(referenced responses 1,3, and 11 in Delphi letter) Lack of knowledge of law, both administrative and mechanics. Narrow perspective of medical logistics and potential for "sweetheart" deals(this was his original response)..pressure from med log officer's boss to buy inappropriate items...exceeding warrant and entering illegal agreement.

Major Rep-Legality is the paramount issue here.

Lt Col Delaney- Accountability and learning the purchase system.

Discussion: The problems envisioned ranged from the philosophical to legal. This discussion will look at five areas brought out in the interviews and Delphi responses: lines of authority, "sweetheart" deals, need for an adequate data base, consequences of exceeding authority, and checks and balances.

The area of who the medical logistics officer would work for and the pressures he would be under to make unauthorized purchases was initially mentioned by Colonel McChesney in his letter.(44) In several interviews respondents mentioned the term "gold plated shovels" to mean the the medical logistics officer would be under a great deal of pressure from the superiors to buy unauthorized or at least, unnecessary items. The responses from the contracting side seemed to focus on the lines of authority and how would the medical logistics officer handle the pressure to do something of a questionable nature. The medical logistics answers addressed the technical mistakes which would be made and the repercussions from the contracting community. Mr. Crabtree stated the medical logistics officer with a warrant would be more likely to purchase brand name items rather than generic equivalents because those are the ones of which he is most familiar. (12) Lt Col Delaney also felt that accountability would be a problem, but not too serious due to the low dollar limits of the warrant.(15) Captain Hill stated that while he did feel that there would be some pressure to make unethical buys, this pressure already existed, and felt confident that most medical logistics officers could deal with it without difficulty. (36) Others, such as Mr. Evans, felt that while the pressure may be put on the medical logistics

officer, there was also a lot of pressure placed on the contracting officer to make purchases of questionable propriety.(23) This question of dual loyalty is not new to the experiment described here. The matrix form of organizational design is used extensively throughout the Air Force, and particularly within Aeronautical Systems Division (ASD). In the matrix organization the contracting officer may be working on more than one project and reporting to several different bosses simultaneously.(40) Major Harris Keller, Chief of the Pacer Quiet Management Division in ASD and a veteran of matrix organizations discounted the seriousness of the split loyalty questions. His view on matrix versus traditional organizational design was, "The loyalty of the individual is not to a boss or an office, but to the mission. I have worked in several matrix designed organizations and have not felt any strained loyalty to anyone. I am there to make sure the mission of the Air Force is accomplished, not to worry if I offend anyone's conception of which 'team' I'm on." (40) Often the officer is receiving his efficiency rating from one person but reporting to another on a daily basis. (40) This matter leads directly into the area of "sweetheart" deals.

In the initial interview with Mr. Crabtree he felt very concerned about this point. He stated that the temptation for the medical logistics officer to set up a kickback type of arrangement with a local vendor would be very strong. He felt that the temptation may be difficult for the medical logistics officer to resist. (12) This response was used in question form in nearly all of the rest of the interviews. Almost every respondent, while acknowledging the temptation would be present, seemed to downplay the seriousness of the threat. Captain Hill stated that it was a matter of personal integrity, and if a medical logistics officer were so inclined, there was little

which could be done to prevent such a deal being set up even now.(36)

Major Gruendell when asked if he thought the medical logistics officer would be likely to set up such an arrangement answered, "Not any more than the temptation to set one up with the Base Contracting Office now. There are enough levels in our Med Center to control that type of thing."(30) Captain Baldwin felt that he would not be under greater pressure than he was now. He pointed out that in the larger facilities there was a certain amount of "distance" between his "customer" and him, but did feel that this might be a problem in smaller facilities. (3) Commenting on this matter of "distance" from the customer, Major Gruendell said, "All of our requisitions are originated by the accounts, I don't work for them and they don't work for me. In a small clinic that may be more of a problem however, I don't see it as a serious problem." (30)

The need for automation was the foremost concern of the individuals most directly involved in the experiment, the medical logistics and contracting staffs at March AFB. When asked what they saw as the biggest problem with this experiment both groups strongly felt it was this lack of an adequate data base. Sgt. Couyette the NCOIC of Local Purchase in medical logistics, and one of the people who actually made the buys, stated, "I would come in early and they would be working the buys, I could come in at 11:00 at night and there would still be someone here working on them (the buys), same thing on the weekends. It just takes too long to make these buys by hand. We have to set up a history, find a source, make the calls, get the quotes, and then type the purchase requests."(10) Captain Taylor on the same subject said, "We might buy an item that contracting had bought in past months, but we had access to none of the information that they had

already assembled. Same thing would happen if we made a buy one week at \$400 for the item and the next week the order was for two of them putting the total price over \$500, then contracting had no history on the item and had to run it through their CIAPS system. It was a lot of wasted effort."

(61) The staff at contracting had a similar conclusion from a different perspective:

"Without a doubt the biggest problem is building a data base. Right now Med Log does not have an adequate data base to make the buys efficiently. What they need is, at a minimum, a source and item file for their products. We tried to get a backup set of tapes made by Data Automation that Med Log could access, but were told this was not feasible. We do not feel it would do any good to allow them access to our computer for several reasons. First of all, it would defeat the purpose of the program. It would mean a total of four trips between Med Log and LGC(contracting) for a single purchase order. This could lead to potential for lost paperwork and more delays. If we allowed them to put in their requirements it would kick out the buys on our side, and we would have the responsibility for following up on any delinquent actions. You know the regulations are pretty clear on time frames allowed for different priority buys. If Med Log exceeded these limits we would be the ones who would have to answer. It would also cause our lead time procurements to skyrocket due to the extra time needed to transfer documents between Med Log and LGC. We are judged on several things, leadtime being one of them. With Med Log on our system, there is no way we could track whether the delays were our fault or theirs. In point of fact, if Med Log went on to our system, it would just be easier for us to take back the entire program...Another point is that we had to build our data base from scratch and it was quite tedious. It is quite large and we're not sure how much of it is appropriate for their needs. We think they should start building their own data base. When they think about implementing this program elsewhere they should take into consideration the time it takes to build the data base and allow this period as lead time. We think the way the program is set up now is unfair to the

Medical folks, since they don't have the automation or extra manning with which to do it."
(29)

When Captain Baldwin arrived at March AFB he attempted to have the medical logistics staff gain access to the CIAPS system. He felt that if he could input the demand into the system and receive the trailer cards and abstract that he would be able to make the purchases in a much more expeditious manner. The experiment had been pretty much halted from 31 October 1985 until his arrival in February 1986. It was not until his warrant was received in very late March that the experiment was really put back into full swing. Captain Baldwin was well suited to this assignment as he had worked as a buyer in contracting before receiving his commission as an Air Force officer. He was therefore familiar with many of the regulations, terms, jargon, and CIAPS system.(3) During the initial interviews he expressed great disappointment in the decision by contracting to not allow medical logistics access the the CIAPS system. He felt that the additional trips were of minor consequence in view of the benefits derived. He stated that his people were making an average of three trips a day to contracting already and did not feel this was the reason the request had been denied. As he saw it, it was a matter of contracting being overly concerned with its rating from SAC Headquarters. As Captain Baldwin stated, "Simply put, we have to get on line to contracting data base. It just does not make sense for us to develop our own. I brought up this suggestion as soon as I got out here with Mr. Mantz and 1Lt. Groce. It was 1Lt. Groce who recommended against it. Contracting is very scared that our being on line is going to hurt their ratings in SAC's eyes..." (3)

The problem was not with new items, as these must have a suggested source listed on the request, but with items which were recurring. When the Requirement List comes out it identifies the item by stock number and nomenclature, and if it is a Local Purchase, Centrally procured or Depot item. It will also indicate the last price paid, but not the vendor, or any other qualified sources. The stock records clerk must then find a source for the item, get a quote and determine if it is fair and reasonable, if so an order can be placed, if not then an alternate source must be located. In order to ensure that there is adequate competition sources should be rotated on a periodic basis, so additional sources must be maintained. All of this calling takes more time than it appears here in print. Often the person who can give you the quote is not available, the company is out of business, the prices have changed, the company no longer does business with the government, and a myriad of other reasons can slow down this seemingly simple procurement action. Having a data base is necessary in order to have alternate sources and quotes available, as well as a buy history showing where you bought this item last and who else can supply the item. This provides the buyer necessary documentation that competition is being sought, and small business is being used whenever possible.

The necessity for the data base as evidenced from the Delphi responses, seemed to be a function of the position of the individual responding. It was the primary concern of the March AFB personnel, but not as critical to SAC Headquarters as evidenced by Mr. Evans response, "The data base can be quickly accumulated from new medical buys. I do not see it that important that contracting's data base be shared." (23)

There was great concern about how the medical logistics officer would handle any breach of regulation or law. Mr. Crabtree was concerned with how the medical logistics officer would handle a protest, lack of knowledge regarding the FAR, and what would happen if and when he exceeded his authority. (12) Major Gruendell saw a potential problem in ratifications caused by the "temptation to buy more that your warrant would allow, plus the temptation to split orders might cause a problem." (30) Another problem he saw was the "need to learn the contracting jargon, I think that will cause us as many problems as doing the buys incorrectly. We need to be able to talk intelligently to the 'experts', the people who could be our greatest critics." (30) When asked about this problem of exceeding the warrant, Mr. Evans said, "First of all I would hope that they would start being very careful when the total purchase reached the \$450 point. I am sure though, that at some point the warrant will be exceeded by someone...In such a case, I would think that Med Log officer would just call the contracting officer and tell him about it and have contracting sign for the purchase. The Med Log officer must be careful because exceeding your warrant falls under the provisions of the anti-deficiency act." (23) Mr. Mantz when asked what he would do if the medical logistics officer exceeded his warrant said, "We don't see that as much of a problem. The limits of the warrant are very clearly set out. If the Med Log officer had a problem I would expect him to contact us." (43) In a phone conversation on 10 June, Mr. Mantz relayed the information that the warrant had been exceeded once in the amount of \$11. He said in that instance Captain Baldwin called him up and he signed for the purchase order. (43) Several people when asked about this problem felt that the relationship that the contracting officer and the

medical logistics officer had established would be important; if there was a sense of mutual respect and cooperation it could be easily dealt with, if the relationship was adversarial, it would provide the contracting officer with sufficient "rope to hang" the medical logistics officer. Mr. Evans felt the experiment could not work at a base where the relationship was not positive. In fact, he stated that March AFB had been selected as the test site only because the contracting officer at Offutt had so vehemently opposed it being placed there. (23) Captain Baldwin said, "If the contracting officer is against the program you are sunk. There are enough obstacles that they can throw in the way that it would be an impossible situation." (3) Major Gruendell said the relationship between the contracting officer and the medical logistics officer must be positive to make the experiment work. "We need to let the contracting officer know that we appreciate the work he does for us, the complexity of the law is making his job more and more difficult. That complexity slows him down and he can't support us the way he would like. We need to have a cooperative relationship." (30)

The matter of how the medical logistics activities would be audited to be sure that all actions were in accordance with law and regulation was addressed by several respondents. Mr. Evans in the design of the program established monthly reviews by the contracting officer, and more often if he felt it was necessary. When the program was fully under way and well established the reviews would be cut back to no fewer than twice a year. He also notified the Office of Special Investigation (OSI) as to the specifics of the program and tips on what to check up on if they were suspicious of any wrong- doing. With these safeguards, as well as the normal channels of review, such as the Air Force Audit Agency, Health Services Management

Inspections (HSMI), Management Effectiveness Inspections (MEI) and the Operational Readiness Inspections (ORI), that adequate provisions had been made. (23) Most respondents saw the need for close supervision and review of the medical logistics account during the initial 90 days of the experiment. Mr. Crabtree saw this as a type of no-notice inspection, while Lt Col Delaney felt it should be a more "staff assistance" visit. (12,15) Lt Col Delaney cited his experience with the Morale, Welfare and Recreation (MWR) function at a former base. He said that when these inspections were made they were scheduled in advance. A report of the findings was written after the visit. All of these observations had been fully discussed with the MWR staff during the visit. Lt Col Delaney felt this was a more effective method of inspecting as it was done in a supportive rather than punitive manner. (15)

As a follow on to this question, many respondents were asked what they felt would scuttle the program. What one element, if unresolved would cause the experiment to fail? Captain Baldwin felt it would be "time". There just is not enough time to make all the sub-\$500 purchases with the staff and automation we now have."(3) Lt Col Delaney felt it would be "a foul up at the test base, a contracting officer sitting out there ready to be an 'I told you so' type of person, and if Medical pushes too hard. This must be a cooperative venture". (15) Mr. Mantz felt it would be the shortage of manpower at the Hosptial, and attitudes. (43) Mr. Evans stated it would be a parochial attitude held by some in contracting that only they can perform procurement functions. (23)

Colonel McChesney first brought up the idea of checks and balances. He wrote, "You realize that both in government and the private sector, the functions of requisitioning, purchasing, receiving, and paying are generally

separated. This is done to preserve fiscal integrity, yet MSC warrants would combine all these functions except for paying." (44) As evidenced by Colonel Harsanyi's response above, he feels that in the private sector these functions are often assigned to the medical logistics functions. Lt Col Delaney felt that there were adequate safeguards in the system to insure that no improprieties were taken. (15) Major Gruendell and Mr. Evans expressed similar feelings. Captain Baldwin had a very practical suggestion, he said, " I suggest that the Med Log officer and buying personnel be taken off the list of those authorized to certify the receipt of the item. That way it would break the cycle"(4) What he is referring to is that every item which arrives at medical logistics must be signed for as having been received. Only those certified as receiving agents can sign for the goods. By taking the medical logistics officer and buyer off this list they would no longer be able to order, receive, and certify for payment on an item.

Question 4. What type of training do you think the medical logistics officer should receive?

Colonel Harsanyi- I think the other responses support the need for standardized training. However, as stated previously, the best training course would be conducted at base level.

Colonel McChesney- Stay with original response (In his original response training was treated as a secondary issue which would be addressed based on the success of the experiment at March AFB)

Mr. Evans- The course at Lowry (AFB) is too expensive. Specialized training could be arranged by MAJCOM or base. I would envision no more than two weeks with emphasis on small business, competition, fair &

reasonableness of price, rotation of sources, standards of conduct and file documentation.

Captain Hill- A good short course which encompasses all appropriate aspects of effectively managing a limited warrant program (i.e., contract law, FAR, and small business issues)

Captain Taylor- A week of training at base level.

Captain Baldwin- Limited training. We are not doing any formal contracting. In a few days a local course could be taught to medical logistics (personnel).

Mr. Mantz- One day training with follow on if needed.

Mr. Pierre- The base level contracting course and two to six months as a buyer in the base contracting office.

1Lt Groce- Because of his responsibility as a contracting officer, he would need an overview course of supply buying in addition to working with a supply buyer.

Major Gruendell- Just as much as a new buyer in contracting is given plus several months OJT with base contracting.

Mr. Crabtree- OJT and formal training (no clarification on length provided)

Major Rep- My position on this is not very strong. Take whatever we can get.

Lt Col Delaney- Local BCO (Base Contracting Officer) given, small purchase procedures, approximately 30 hours worth at most.

Discussion: The area of training elicited the widest variety of responses. The extent, detail, importance, subjects to be covered, and length of training varied from person to person regardless of the AFSC held. There was little or no consistency based on the level of experience, position held or

background. This discussion will look at what training needs have been identified from the contracting perspective for their own personnel, and what training is currently available in the area of small purchasing.

Training of contracting personnel has been an ongoing concern for many years. Several theses have examined this issue, notably the 1984 thesis by Lieutenant Commanders Kurt Huff and Randale Bales at the Naval Postgraduate School. Their thesis dealt with the need for training at the intermediate level of small purchasing, and assumed the individual had completed both on-the-job training as well as entry level small purchase training. (38:11) For an overall perspective on the small purchasing field, Lieutenenat Margaret Hamman's 1975 effort provides excellent background. (32)

The issue of training is not exclusive to the limited contract warrant individual. In the final report of Task Group 6 a good deal of time and effort was spent developing the type and extent of training necessary for a GS-1105 job classification. GS-1105 is the job series civilian personnel buyers hold. The importance of having a highly trained staff is well articulated in their observation, "This program (the Procurement Career Management System) also recommends support of the current and on-going in-depth analysis and evaluation of the GS-1105 work force and the utilization of a planned training and career development program to provide competent, efficient, and highly qualified personnel. It advocates long overdue recognition of a work force comprised of over 5,000 purchasing personnel." (51:x-4) It should be noted that the 5,000 personnel identified are only the buyers. According to figures provided by Mr. Dick Tardif, Program Administrator at AFCPMC/DPCCQ there were 10,881 civilian

employees involved in the Procurement field as of 28 February 1986; of these 444 were rated as GS-1105. (60) According to the 1986 Air Force Almanac published in Air Force Magazine, there were 3323 active duty personnel assigned to the 65XX career field of which 1652 were officers and 1671 enlisted. (64) The active force does not designate its personnel by buyer series, so the exact number of personnel acting in this capacity is unknown. The need for training was pointed out in a report entitled Report on Functional Management Inspection Of Effectiveness of Base-Level Small Purchases of Materiel and Services written by HQ AFISC at Norton AFB in 1986. In their evaluations they found that approximately 70% of the GS-1105 series employees had no formal training in purchasing. (62:14) They concluded, "there is a need for detailed 'how to' training for new buyers and followup clerks so that they can more effectively and efficiently accomplish the tasks associated with small purchase procedures." (62:14) They also recommended that a small purchase formal training course be developed for newly assigned base-level contracting personnel. (62:14) Many of the respondents to this effort felt that because of the extremely low dollar threshold of the warrant, and the simplified purchase procedures available, a minimal amount of formal training would be needed. The least training time recommended was from an individual in contracting who during the initial interviews recommended a two hour orientation and then follow on training if needed. The longest was Mr. Crabtree's recommendation that the medical buyer work in an internship arrangement for 6 months and then attend the formal technical school at Lowry AFB. (12) Major Rep, in his initial interview, felt that arranging for attendance at the formal technical school at Lowry would be a good idea, and best accomplished in conjunction with a

permanant change of stations (PCS). (57) Several others while acknowledging the benefits to be derived from attendance at the Lowry AFB course which lasts 8 weeks, recognized that it was not a practical alternative due to funding and time. The basic argument came down to; must the medical buyer who is dealing with a very, very narrow portion of the contracting business need to know as much as the buyer who deals with purchases over \$25,000? If these individuals do not need that much training, then how much is enough? Is there a need to know the legal ramifications of what a contract is, who can obligate the government, what the repercussions of exceeding contract authority, standards of conduct as outlined in AFR 30-30, and a myriad of other issues? What should be the mix, and who should administer the course? The answer is not clear, partially because there is nothing to use as a standard. GS-1105 buyers do not receive a standardized training upon being hired.

Task Group 6 recommended that the GS-1105 series buyer complete 240 hours of training which would be comprised of 120 hours of classroom training and 120 hours of on-the- job training.(51:x-5) The report went on to recommend, "this training ought to be designed to meet the basic needs of all personnel who are required to procure supplies and services at differing levels of complexity utilizing simplified small purchasing procedures...As a minimum it could be provided in three parts: (1) a self-contained desk guide that would provide proper step-by-step guidance to be used on a daily basis at the work site by all Government purchasing agents, (2) a workbook and (3) an instructor's manual which augments the desk guide and provides more detailed and comprehensive background data concerning each phase of the simplified small purchase acquisition process." (52:x-5) In Attachment

1 of the final report the 120 hours of classroom instruction are broken down into the following areas:

A. General Subjects

1. Principles of buying, market conditions, and competition
2. Use of business judgment
3. Federal procurement responsibility and authority
4. Ethics and standards
5. Purpose and objectives of small purchasing and use of mandatory sources
6. Socio-economic requirements.

(51:Volume II:40)

In addition, seven "Core Subjects" were recommended. They were:

1. Small or simplified purchasing requirements for planning, requisitioning, competition, solicitation, evaluation, pricing, and documentation.
2. Small purchase methods such as purchase orders, SF-44, blanket purchase arrangements, requests for quotes, open market, imprest funds, and credit cards.
3. Government sources of supply.
4. Requirements for selection, terms and administration of delivery orders, and terms of contracts.
5. Administration of orders, payment procedures, including fast pay, methods of inspecting and testing, transportation and deliveries.
6. Purchasing reports.
7. Imprest fund requirements.

(51:41)

The respondents who addressed the content area of this question felt that the mechanics of making the purchase were very important. Other subjects which were recommended for inclusion in a training were: standards of conduct, small purchase portion of the FAR, determination of Fair & Reasonable, aspects of P.L. 95-507 (Small business set-asides), fundamentals of contract law, mechanics of the DD 1155, what a protest is, and how to handle one, ratifications, rotating sources, and familiarization with contracting codes used on the DD 1155.

The aspect of a formalized training versus a locally developed course brought out some very interesting and provocative points. Major Gruendell in the initial interview recommended a standardized course, not only because it could be more easily administered, but because it would give the Medical Service Corps officer a sense of legitimacy. (30) He said, " I would want to have some formalized training, simply because of things like protests. We would need to have some sort of certification to show that we had completed formal training. People could point to that certificate on the wall and instantly recognize that the person they are dealing with has had some sort of recognized training in the area of contracting. I think this would protect the Air Force somewhat." (30) Mr. Mantz from contracting at March AFB felt that formalized training was not that necessary due to the dollar limit of the warrant. He stated, " What we did here was have the Med Log people over here for a 1/2 day session for the 'big picture'. Then we sent a buyer from our office to Med Log for 5 days to show them the details of the system, and then did weekly follow-up to be sure everything was going ok. The buying of items in this price range is not complex or difficult, the only problem is that one of the data base we mentioned before. " (43)

The training options available presently are the Defense Small Purchasing course developed by the United States Army Logistics Management Center (ALMC) at Fort Lee, VA, the Small Purchases course published by the National Contract Management Association (NCMA), the formal technical school taught at Lowry AFB CO, and On-the Job training. The formal course, while ideal for presenting an overall introduction to the contracting field, is not a reasonable alternative at this time. This is because of the expense of sending Medical Service Corps personnel, the time it would take to train them, and only a small portion of the material presented would be relevant to the small dollar figure involved.

The Defense Small Purchasing course from ALMC is available in three formats: in residence, presented by instructors who travel the country, and by correspondence. The material is geared specifically to new personnel assigned to the small purchasing activity at base contracting. The course is available to all civilian and active duty personnel in the DoD. The correspondence course comes with a workbook and set of eleven audio tapes. The student listens to the tapes, completes the assignments in the workbook and then takes an examination. There is an instructor's guide which is sent with the workbook for the person administering the course.(21:1) The subjects covered in the coursebook are:

- Introduction to Defense Small Purchase Course
- Acquisition Responsibility and Authority
- Policies and Procedures
- Purchase Requirements
- Fixed-Price Purchase Order/Delivery Order
- Unpriced Purchase Orders
- Written Telecommunicated Purchase Orders
- The Imprest Fund

Blanket Purchase Agreement
Order-Invoice-Voucher Method
Mortuary and Utility Purchases
Standards of Conduct
Acquisition from Government Sources of Supply
Fast Payment Procedures
The Buy American Act/International Balance of Payments
Administration of Small Purchases
Small Purchase Course Review
(20:3)

The course includes two examinations during the presentation of material and a final exam. Of the subjects presented, those relevant to the medical buyer operating under the limited warrant would be:

Introduction to Defense Small Purchase Course- goes into the history of small purchasing and the dollar limit increases over the years.

Acquisition Responsibility and Authority- defines the heirarchy of the contracting activity, source of authority, the differences between a Principal Contracting Officer (PCO), Administrative Contracting Officer (ACO), and Termination Contracting Officer (TCO) and how small purchasing contracting officers often handle all three roles.

Policies and Procedures- defines terms, types of contracts, and DoD policy regarding competition and price reasonableness. There are some sections which are not relevant in this module including a discussion of personal and nonpersonal services, notification of unsuccessful suppliers, and forms used for written solicitation.

Fixed-Price Purchase Order/Delivery Order- those sections dealing with the advantages of the DD Form 1155, difference between unilateral and bilateral contracts, difference between a BPA and BDO, and familiarization with the DD Form 1155.

Written Telecommunicated Purchase Orders- when they should be used and their advantages.

Standards of Conduct- the entire section which deals with prohibition against accepting gratuities, defines conflict of interest, covenant against contingent fees, officials not to benefit, and conditions outlined in DODD 5500.7(Standards of Conduct).

Fast Pay Procedures-how and when to use fast pay, and conditions required to allow its use.

Buy American Act- under what conditions items of foreign origin can be purchased.

Administration of Small Purchases- conditions of a contract, elements of a contract, methods of modifying a contract.

The course has an excellent section which outlines how the various forms are to be filled out block by block, as well as extracts from the pertinent laws and regulations. While some sections of the course are not appropriate for use in this narrow context , the information presented on the subject of imprest funds, sources of supply, blanket purchase agreements are excellent for the general knowledge of all medical logistics personnel. At the technical training course taught to the Medical Service Corps Officers at Sheppard Air Force Base Texas, only a short portion of the eleven weeks can be devoted to contracting. According to Captain David Akuff, medical logistics instructor, the students are presented information from AFM 67-1 Volume V Chapter 16 which deals with Local Purchase. There is a two hour formal presentation, but no specific handout regarding contracting/medical logistics interface.(2)

The ALMC course had 2848 students enrolled as of March 1986 of which only 221 were Air Force or 7.7%, of which 184 were civilians, 10 officers and 27 enlisted. (71)

The course developed by the NCMA is somewhat out of date having been last published in 1983, prior to the enactment of the Competition in Contracting Act (CICA) and publication of the FAR. (53) It is presently under revision.(56) This course is taught through the use of tapes and slide presentations. It is part of a series used in conjunction with the Certified Professional Contract Manager(CPCM) examination. The goal of the course is "to help you improve your job skills, as well as to inform and entertain...The content is based upon the information which is required of a candidate taking the CPCM exam...". (53:1-1) The course provides a good general background into the area of small purchasing. The focus of the course is different than the ALMC course as this audience is a specialized group of 18,000 professional contract administrators whose primary focus is not small purchasing, but the broader aspects of contract administration. (56) This material is presented as part of a seminar offered by one of the 112 chapters throughout the country. Because of the autonomous nature of this organization, the course is only offered on a as needed basis determined by the local chapter. Some of the appendices in the NCMA course are excellent, among these are the ones detailing specifications on purchase descriptions, a good general background on small purchasing written by J. Michael Slocum, steps for determination of small business availability, and the sections dealing with extracts from laws, regulations and executive orders.(53) No exact figures were available regarding the number of people enrolled in this

course as statistics are maintained by each of the 112 chapters separately.

(56)

There are some private consultants who provide training in this area as well as General Services Administration (GSA) courses. Their exact content and availability were not documented.

Question 5. What type of equipment is needed to make this experiment workable?

Colonel Harsanyi- When MMMS-OL (the on-line medical logistics management system, due to be put into service during FY '87. First test base installation due in July '86), is available it will include all the capability required to make the experiment work. Until that time, word processing equipment or microcomputers should suffice.

Colonel McChesney- microcomputer

Mr. Evans- Whatever equipment is needed for a contracting buyer is required by a Med Log contracting officer. As a minimum a Z-100 microcomputer with modem. The data base can be quickly accumulated from new medical buys. I do not see it that important that contracting's data base be shared.

Captain Hill- A microcomputer is a must.

Captain Taylor- At least a Z-100 microcomputer with a 20 MgB hard disk. The logistics officer should be given ample time to load up the data from the item and vendor listings at base contracting.

Captain Baldwin- Letting us run items through CIAPS would be the best. Now we are using a microcomputer and a typewriter. The microcomputer is printing out the DD 1155's.

Mr. Mantz- That would be the choice of the medical personnel.

Mr. Pierre- A Z-248 (an upgraded version of the Z-100) microcomputer and access to base contracting data base.

1Lt Groce- Some type of a data base to track previous purchases, vendor data and history, government contracts, purchase orders, etc.. A memory typewriter is not nearly sufficient. A good Z-100 program would probably be able to handle the level of data (including the printing of the DD Form 1155)

Major Grunedell- We need microcomputers and high speed printers. Also, must be linked to contracting.

Mr. Crabtree- At least a Z-100.

Major Rep- Z-100

Lt Col Delaney- Microcomputer, modem, tied into BCAS.

Discussion: The type and capacity of equipment necessary seemed to grow as the experiment progressed. In the initial interviews with the Air Staff and SAC level personnel the necessity for a microcomputer was not even unanimous. In the initial interviews, Mr. Evans said, "Well a Z-100 microcomputer would be nice, but I can't say it would be absolutely necessary..."(23) Captain Hill saw the need for the Z-100 but not for building a data base, but as a word processing machine for the DD 1155's. (36) The only individuals who saw the need for a large capacity system were those directly involved at March AFB. Both contracting and medical logistics personnel repeatedly said the system had to be large enough to handle the vendor files and buy history.

There are two developments in the equipment area which were mentioned by several of the respondents which will impact this experiment

in the future, the BCAS (Base Contracting Automated System), and the MMMS-OL (Medical Materiel Management System-On Line). Each of these systems represents a significant step towards the development of a management information system.

The BCAS is scheduled to go on-line at Kelly AFB in July 1986. (45) The goal of the system, according to Mr. Ken Mellott, System Analyst and office of primary responsibility (OPR) at AFLC for BCAS implementation, is to develop a paperless procurement system.(45) Each command will adapt the BCAS to meet their particular needs and desires. The system envisioned at SAC will be different than the one in AFLC. According to Mr. Mellott this is because of the different needs of each command. Where AFLC has large Air Logistics Centers and few bases, SAC has 25 bases, most of which are rather small. The system was prototyped at Lowry AFB in Denver and is now beginning wider implementation. The hardware contract has been awarded to Wang, and the software was developed by the Design Center at Gunter AFS. Beyond the Air Force developed BCAS software, commands are procuring commercial software for add on capabilities such as file management and word processing. Mr. Mellott's goal is to procure a software package which has already been proven in the commercial world and which can be readily applied to Air Force needs. He stated that he felt this would reduce the development costs, time of implementation, and increase the level of software technical support.(45) Mr. Mellott sees the BCAS as not only procurement support system, but an office automation system. He feels that in the procurement area there are chokepoints which cause the long delays in the procurement process. Two of these are the system operations branch where the information is loaded into the system,

and the fact that the CIAPS system is not a "user friendly" system and requires extensive knowledge of numerous codes and input commands. The CIAPS is also only used by the systems people, not the buyers or customers. Mr. Mellott envisions the BCAS with several users on base having access terminals, among these will be medical logistics, civil engineers, comptroller, and base supply in the research, customer liaison, stock control, and receiving areas. Medical logistics would be able to input certain requirements such as the DD Form 1348-6. The system would provide a menu driven system of inputs of all information required on this form. Then the computer would take the information provided, check it against any existing descriptions, stock numbers, or other items within the system that could meet this need. If it can't identify an existing item which is adequate, it will access the vendor files as to who is qualified to fill this order, check the catalog prices and generate a solicitation which will be mailed to the qualified vendor. (45) Mr. Mellott stated that in its optimal form, this system would operate as a type of an Interorganizational System (IOS). This is where the computer system of one company or activity can access information from another system.(6:134) In this instance medical logistics could go on line and check the prices and availabilities of items from the different vendors listed as able to meet this requirement. The documentation of small business utilization would be enhanced, as well as justification for why small business was not utilized if appropriate. Mr. Mellott admitted this was an optimal situation which he did not anticipate to occur in the near future.(45) He also foresaw the day when items listed on a base service contract, such as typewriters, could be called in for repair by simply entering the serial number into the BCAS. The computer would then

search its records, locate the serial number and produce a work order with location, building, office, and contact point which would be sent electronically to the designated contract repair center. (45) Users would be assigned different levels of access and authorization based on their individual needs. These access levels would be controlled by base contracting.

There are presently three bases testing the BCAS program: Eglin AFB, Maxwell AFB, and Lowry AFB. The programs they run are not identical although they all are called BCAS. In soliciting information regarding lead times, and Priority rates from these bases it became clear that each base had its own way of accessing information. Information which was not available at one base was easily retrieved at another. It was not clear if this was a function of software or operator capabilities. At Maxwell AFB the implimentation of the BCAS, in the opinion of medical logistics, has not yet made a positive impact on the procurement of medical items. The NCOIC of the medical logisitcs account, MSgt Branch, stated he could not see any reduction in either Priority rate or Lead Time. (5) The figures from Maxwell Base Contracting confirm MSgt Branch's feelings. The Priority rate was 49.7% for medical items in March 86, and Lead Times was 25.57 days for Routine items for the 2nd Quarter FY '86.(4) This was not as good as March AFB Contracting's Priority rate of 37.07% and Lead Time of 15.4 days for Routine medical buys.(31) Mr. Mellott points out that these test bases really are not running full-fledged BCAS systems, what they are operating is a CIAPS system with BCAS equipment. (45) At Maxwell the buyers do not have terminals, nor do the using activities such as medical logistics. Mr. Mellott is quite certain that when these are installed and access is direct, Lead Times will decrease and service increase. (45)

Mr. Evans when asked about how he saw the impact of BCAS on this type of experiment stated, "I don't think BCAS will change the need for this program. The motivation behind this is still based on the premise that the Med Log officer knows more about the item and has more motivation to make a correct buy. What difference does it make if you buy it fast, if you still don't know what you are buying? The motivation to make a good purchase is still in Med Supply and not in contracting."(23) Mr. Mellott when told of Mr. Evans reply, stated he felt that the buy would be made faster and better as it would be medical logistics uploading much of the information into the system. If there was a problem in the buy, it would probably be as a result of an error on medical logistics and not the buyer.(45) Mr. Crabtree in the initial interview felt that the BCAS system would speed up the time it took to make a buy, thus alleviating some of the backlog which existed.(12) Until BCAS becomes fully operational its ability, and capabilities will remain unknown.

On the medical side, the MMMS-OL is scheduled for implementation at Maxwell AFB in July 1986. This system will run on Datapoint hardware using software being developed at the Design Center at Gunter AFS, AL. The draft copy of the users guide has just been completed. This manual, AFM 167-230, outlines in detail the actions necessary to execute all of the transactions required for the record keeping of the medical logistics account. (18:1-1) The capabilities of immediate interest are those dealing with Local Purchase. The system will allow Vendor Files to be built for each of the BPAs and BDOs in the medical logistics account. It will "contain purchase order, terms, and other data necessary to print purchase orders with a routing identifier (RID) of LXX." (18:3.11.d) The system also will build a

Historical Data File, which records transaction history against an item by stock number. "This file is the primary source for retrievals and inquiries to determine the transaction history of a particular stock number." (18:3.10) This would allow the medical logistics account to research if the item had ever been bought before, and if so from what source. As noted earlier, this was a major criticism of the experiment from the staff at USAF Regional Hospital March.(3) Like the BCAS, the MMMS-OL holds great potential which has yet to be realized. Most medical logistics officers welcome the idea of going "on-line" with their management system noting that the present system allows input only by card deck, most accounts only run one time a week, and errors often take 3-5 runs to correct. (36) One of the drawbacks of this immediate status is the fact that the account must "balance" at the end of each day. With a daily closeout, all errors and discrepancies must be rectified before going home, as each days run is built on the previous.(30) Major Gruendell noted that in a large facility such as his (Medical Center Wright-Patterson), he will have to add another shift just to close out each days actions. He felt that while the immediacy of the system is beneficial, it will also reduce the ability to correct errors before they "hit the system". (30) In the present system an erroneous transaction can often be caught and corrected before the next weekly run. The problem is, if it is not caught, the correction can take several weeks to undo.(30)

There was no indication from either the people in contracting or medical logistics that there was any plan to integrate the two systems. Both Mr. Mellott and SMSgt Prejean, the OPR for MMMS-OL, stated that the systems could be modified at a later date to integrate certain information if it was felt to be mutually beneficial. (45,55)

V. Conclusions and Recommendations

Conclusions

This effort looked at the limited warrant program as implemented at March AFB California. The impetus behind the experiment was to improve the service the medical facility could provide to their patients by obtaining the needed items in a more timely manner. The limited warrant was one of three experiments undertaken by SAC Headquarters in October 1985. This effort attempted to answer some basic questions as to the need for this program, the training needed to make it successful, anticipated problems, and necessary equipment. It used personal interviews and correspondence which was followed by a modified Delphi technique mailing to further refine and focus the respondents views.

The evidence strongly indicates there is a problem not only in the medical purchasing area, but the entire small purchasing field. The facts that Priority rates remains close to 40% and lead times are in excess of 70 days in many cases, lend strong support to the position that a problem exists. It remains unresolved if the problem is one of the medical treatment facility assigning too many purchases as Priority, or the system being as slow as some of the medical personnel felt. The fact remains that a medical treatment facility is in business to treat patients, and needs supplies to do so. Any vehicle which can speed up, simplify, and increase the accuracy of the purchases is welcome. If the limited warrant could reduce by even 2% the money now spent on LP medical items, the savings would be over \$2 million.

(37)

Perhaps the decentralizing of the contracting authority outside of the contracting career field is not practical at this time. The success SAC Headquarters has seen with the SF 44 program may, in part, be due to the fact that the contracting officer does not feel threatened with the dilution of his authority. The question may not be if the limited warrant is a viable solution, but is it a viable option right now with the prevailing attitudes and equipment limitations. The approach taken by SAC Headquarters of implementing multiple method improvements in the contracting area should not be viewed as an attempt to find "the" answer, but rather, as an attempt to explore the viability of several alternatives. The fact that medical logistics is actually making buys and reports these purchases are taking less time than previously, indicates that the program has potential.(3)

The responses to the issue of how much training is required indicate the uncertainty which exists as to what is "adequate" training. Responses ranged from a superficial half-day "how to" course being sufficient, (this was the "why teach a man how to build a watch just because he asked what time it was?"), to those who felt that an internship of several months followed by the full contracting officer training course was appropriate, (this was the "there is no such thing as too much knowledge" school). The importance of training cannot be understated. While the buyer may not have to know everything about contracting, he should know everything about small purchasing, and a little about the general contracting environment. A buyer who does not know what a contract is, what are the pertinent laws governing small purchasing, and what constitutes a small business, may be able to perform the mechanics of making a purchase, but will have no idea of how that fits into the entire procurement picture.

The pitfalls pointed out by the respondents could be grouped into two areas: education and cooperation. While many of those interviewed felt that training could be accomplished in a one day session, it is ironic that most of the fears expressed could be alleviated with proper education. The knowledge of laws, regulations, and procedures all can be resolved by proper training.

Cooperation is vital for this program to work. The contracting field is very complex and there is no way that a medical buyer can know all of the subtleties and technicalities. He will need to rely on the base contracting officer's experience, expertise, and counsel. As Mr. Evans replied when asked what the medical buyer would do if faced with a protest, "The same thing the base contracting officer would do, call the legal office and get help." (23) No one person can know everything about contracting or medical logistics. What the limited warrant program attempts to do is teach the person who knows the most about medical logistics a narrow portion of the contracting profession in order to benefit both activities.

The equipment needed to make the program work will not be a question of having a microcomputer versus typewriter, but how much, if any, access to the contracting data files will be available. The key decision will be what level of access the customer, such as medical logistics, will have to the main vendor files. If it is decided that no access will be allowed, then an adequate data base will have to be built to capture historical buy data, qualified vendors, small business classification, and last price paid. The MMMS-OL does not appear to be able to capture the amount and type of data necessary to make these decisions. The alternative will be to not implement the program where access is barred.

On June 30, 1986 the limited warrant experiment came to a formal conclusion at USAF Regional Hospital March. The experiment had seen two different medical logistics officers, the departure of one of contracting's key personnel, and a hiatus from October 31, 1985 to March 1986. The question is, was it a success? What lessons were learned, is it worth repeating, and if so, what can be done in the future to make it more successful? What if any further research should be undertaken?

On 10 June 1986 Mr. Mantz provided his assessment of the experiment in a telephone interview. He replied he felt it had been a "complete failure". He felt the major problems were the lack of on-line capability, lack of adequate personnel to to the job, lack of expertise on the part of medical logistics, and that the \$500 limit was too restrictive. He also felt that the base contracting had been "dumped" on by medical logistics in that the medical logistics office would work a Routine purchase request until it had problems, then cancel it and rerequisition as a Priority through base contracting. He stated that the Priority rate had actually risen during the experiment period instead of being reduced. Mr. Mantz felt that his office could provide better support of the medical mission without the split in contract authority. His only positive comment was that perhaps BCAS would make the experiment feasible in the future. He strongly felt that as it stood on that date, he would be writing SAC Headquarters recommending discontinuation of the limited contract warrant program. (43)

On 20 June 1986 Captain Baldwin gave his assessment of the program. He felt that the program was viable so long as it was limited to the purchase of Priority items. He felt there was insufficient time, personnel, and automation to expect medical logistics to make all of the sub-\$500 purchases.

He said that the dollar threshold of \$500 was adequate as he was unable to keep up with the demands at that dollar level, and raising it would only increase an overwhelming workload. He stated that he resented the fact that contracting got credit for the buys which his people made, and felt that his office had assumed some of the burden, but had received none of the credit. The matter of automation was never far from his mind. Captain Baldwin still strongly felt that without access to the data base that the limited warrant program had taken a semi-computerized system and turned it into a manual one. (3)

Clearly from their conversations the experiment was not as successful as had been hoped. During the interviews at March AFB, the staff in medical logistics was asked why they felt HQ SAC had pushed this program so hard. The reply was, "SAC saw this as a cure-all to the small purchasing problem, their initial expectations were unrealistic." This may be somewhat overstated. The two individuals most responsible for the experiment at SAC Headquarters were Captain Bill Hill and Mr. Bill Evans, both of whom strongly felt that the situation in medical small purchasing had come to the point where action was needed. They instituted three experiments simultaneously; limited warrants, SF 44, and co-locating the medical buyer in medical logistics. They clearly wanted all three to succeed, but even during the initial interviews in February 1986 they saw there would be problems in the program at March AFB. Both had wanted the experiment to be conducted at Offutt AFB so that close supervision could be exercised by their offices. When the base contracting officer vehemently opposed it, and promised a ratification within six months if forced to take it, the site was shifted to March AFB.(23) The ability of a base level contracting officer to

over-ride the desires of Command Headquarters tells a great deal about the contracting career field, and any future implementation of this program. This program will only succeed if the base contracting officer can be made to see that the implementation will not only benefit the medical logistics activity, but the contracting office as well. Complete support of the program will mean inconveniences, alterations to the status quo, and a willingness to sacrifice "ratings" from higher headquarters.

The matter of the access to the CIAPS system seemed to be the keystone in this experiment. It became clear in the early stages of the program that the buys were taking much too long to process due to the manual manner they were accomplished. According to figures provided by Captain Baldwin, the medical logistics account averaged 7.7 buys per day with an average lead time of 1-2 weeks. He advised that most of the items came in within 3-4 days, but there were several which took 3 weeks which adversely affected his average. (3) These buys were accomplished without access to the CIAPS system. Each request was processed manually. Captain Baldwin's request to have access to the CIAPS system appeared to be a viable solution to this problem. While it is true that medical logistics may have had a negative affect on March AFB's "ratings" at Headquarters, Mr. Evans advised that this would have had to be taken into consideration when assigning ratings. (23) Perhaps medical logistics could have been assigned a block of quotation numbers to clearly identify which were their efforts and which were done by base contracting staff. When access was denied, and Mr. Evans could not prevail on Mr. Mantz to allow this access, the fate of the experiment was sealed. Captain Baldwin felt it sent a clear signal to medical

logistics that base contracting was not committed to the success of the program and that Headquarters could do little to help him out.(3)

RECOMMENDATIONS

1. Place the program only at bases fully committed to its success.
2. Allow access to the contracting data base through either the CIAPS system, or the BCAS when available. If not, take six months prior to implementation to build a data base within the medical logistics activity.
3. Place special emphasis on training.
4. Explore other alternatives such as the SF 44 and co-located contracting buyer in the medical logistics account.
5. Try variations such as making the individual in medical logistics who handles Local Purchases a contracting buyer with full access to the contracting data system.
6. Increase the level of education of the contracting community to the positive aspects of this program, and the benefits to be derived.
7. Develop a Computer Aided Instruction (CAI) program tailored to the small purchasing needs of the users.

Discussion:

The reader has the right to know the orientation and background of the author regarding his experience in the medical logistics and contracting fields. The author spent just over three years as a medical logistics officer at McConnell AFB KS. During this period his dealings with contracting were as a customer. In an effort to better understand, and become more knowledgeable about the contracting field, the author elected the Contracting

and Manufacturing option during his AFIT educational assignment. All recommendations are based on this practical and theoretical background.

In the future, the selection process of which bases to implement the limited warrant program must be even more thorough. Bases should be solicited for their interest in participating in this program. Selection of which sites should be based on the mission, the expressed interest of both contracting and medical logistics officers, the experience of the contracting and medical logistics officers, and working relationship already developed. Once a potential site has been chosen the staff from headquarters should plan a visit to sit down and explain what will be the full impact of this program. Both activities must be made to understand not only the benefits to be derived, but the impositions, and inconveniences they will encounter when they initially put this program into effect. The base must be made to understand that headquarters will take into consideration the learning curve effects on their efficiency ratings. You cannot add people to your staff who have little training and expect them to perform at the same level as the experienced staff.

As stated before, the data base is absolutely critical to the success of this program. Without either access to the contracting vendor files or a suitable substitute, the program should not be implemented. The experience at March AFB has shown that when you try to execute a computerized operation by hand you experience inefficiencies. To require the medical logistics activity to build their own data base from scratch does not seem appropriate. Either give them access to the files that already exist, modify the MMMS-OL so that it can provide this information, or continue doing business in the traditional manner.

The area of training is critical. Not only do those individuals directly involved in the buying function have to know more about procurement, but all medical logistics personnel would benefit from further education of the procurement process. When over 40% of the items used in a medical treatment facility are procured through Local Purchase procedures, it is imperative that the medical logistics personnel should know as much as possible about this source. Presently there is sort of a "black box" mentality in medical logistics about contracting. The demand cards are processed and submitted and then until there is a problem, medical logistics does not want to know what is going on over at contracting. The broadening of knowledge about the procurement field cannot do anything but help the medical logistics function, if in no other way, than to be able to explain to their customers why things take so long to arrive. Staff should be encouraged to complete the ALMC Defense Small Purchasing correspondence course, as well as attend all trainings at contracting related to small purchasing. Contracting should be sure to include medical logistics in planning this training on an on-going basis. In this same vein, the development of a CAI program would be ideal in this area. By gearing the content and the level to the sub-\$500 purchases the course would be relevant and useful. By putting it in the CAI format, staff could work on it at their own pace and as time and access to the computer was available. The course could be developed at the Command level for application to their bases. This would allow the course to be tailored specifically to the user's needs.

Contracting officers must be made aware of the benefits of this program. This is best accomplished from within the contracting community through seminars, journals, and memoranda from higher headquarters. Until

contracting officers can be convinced that this program holds benefits for them and their people, it will never succeed. Contracting personnel must be made to see that by divesting themselves of this routine, highly mechanized portion of procurement they will have additional time to handle the onslaught of contracting actions which require their expertise.

Recommendation for Further Study

Several areas hold potential for further study in the area of decentralizing procurement, and the training of medical logistics personnel in contracting procedures. The development of a CAI course would be a very valuable endeavor which would reap immediate benefits for all those working in the medical logistics field. There is no reason why similar courses should not be developed with the civil engineer perspective as well as transportation, maintenance, or base supply. All activities use contracting as their source for goods and services. The more known about procurement the better. Such course development should be geared towards application on the Z-100 microcomputer which is now the Air Force standard.

Further research into the implications of the BCAS system on the procurement process will be viable and valuable in the coming years. This development with its ability to have terminals in the using activities holds great promise. Applications and evaluations of the existing systems will be valuable.

Development of a program which can integrate the capabilities of the MMMS-OL and the BCAS would link two potentially powerful systems. Tracking the buy history, usage, and levels in the MMMS-OL system with the ability to access the vendor files on the BCAS would allow the medical

AD-A174 495

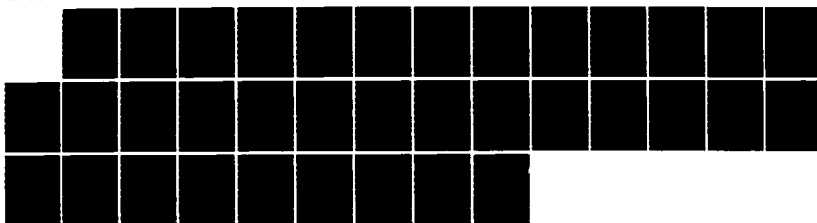
AN EVALUATION OF THE LIMITED CONTRACT WARRANT
EXPERIMENT AT WRIGHT-PATTERSON AFB(U) AIR FORCE INST OF TECH
WRIGHT-PATTERSON AFB OH SCHOOL OF SYST.. C H SAGER
SEP 86 AFIT/GLN/LSM/865-70

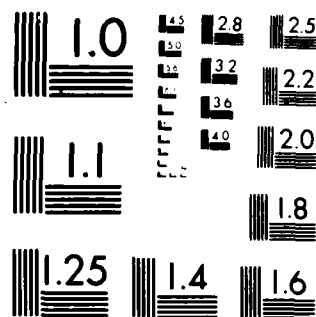
2/2

UNCLASSIFIED

F/G 15/5

NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

logistics function to better manage their stock. If notification came from Depot that an item was cancelled or on long backorder, local purchase research could be done quickly and efficiently.

If this experiment is tried again, a follow up of the viability of the program would be useful. Perhaps the limitations pointed out in this study will be rectified and the next implementation will be totally successful. With a different base and different personnel involved it would be interesting to see if the same sorts of conclusions would be reached.

Final Thoughts

The limited contract warrant is a viable solution if given the proper support and exposure it deserves. The March AFB experiment did not meet all of its objectives, but it did point out several problem areas, which when solved will make this program even stronger. SAC Headquarters and March AFB should be congratulated for their inputs and efforts in trying to make improvements to the complex contracting function.

Appendix A: Delphi Letter

1. Is there a problem in medical small purchasing?

Responses:

-In general there is not a problem. There is a large volume of work, and a great deal of that is in Local Purchase. This is a problem, many of the items should be bought through the depots.

-Yes, small purchases are almost fully automated, and therefore often not given proper attention. It is this lack of attention that I see as a source of the problem. The lack of attention though, is due in large part to the volume of the work. In medical purchasing, the problems stem from other sources. Often the buyer is not familiar with the item he is buying.

-No, there is a large volume and indeed a backlog, but the situation is not out of hand. BCAS will speed up the processing of purchases and may help solve the backlog situation.

-Yes, the workload just keeps getting bigger. Contracting is overwhelmed. They just can't get us the items we need in the timeframe we require.

-Yes, it takes too long for the accounts to get the things they need. Contracting cannot support the medical requirements to the level they need. The number of Decentralized Blanket Purchase Agreements is proof of this. If Contracting could support us to the level they claim, there would be no need for this program.

-Yes, the medical buyer is almost always the least experienced buyer. They are not familiar with the items they are buying and consequently may buy the wrong thing or pay too much.

-Yes, the lead time on items is too long. The major problem is the backlog in Contracting. The contracting system is not responsive to our needs. The number of initiatives shows there is a problem in getting the items to patients as quickly as we want.

-We don't view medical acquisitions to be more complex than other supplies purchased locally. We can generally observe that medical buyers purchase a larger number of line items than buyers of other supply items in a like

period. If there is a problem area unique to medical buying, it probably rests within the characteristics of high requisition priority rates and a large volume of requisitions.

-Generally speaking, our bases do experience problems with small dollar value purchases. The major problem is timely contracting at a reasonable price which may be caused by any or all of the following: workload, quotas established for competition, small business set-asides, poorly written and researched requisitions submitted by Medical Logistics.

Question restated: In light of these responses, do you feel there is a problem in small medical purchasing?

2. Do you think the limited warrant is a viable solution?

Responses:

-I think it is a fact of life, that it will come to that. I see it as a further example of decentralization of authority. I think it is a possible solution if the person is trained and knowledgeable.

-I do not think that satelliting is the answer. BCAS will make our operation more efficient, I view this as just another swing of the pendulum. This has been tried in the past, and I think we will find now what we found then, that the way to avoid problems with unauthorized purchases is to centralize the contracting authority in the contracting office. One office, one focal point.

- Yes and no, on the positive side is the fact that there would be one less middleman, secondly, the number of priority buys could be reduced because of this decrease in the processing time of each request, thirdly, a reduced cost and better product. A Medical Logistics officer with a limited warrant should be able to purchase the right item at the best cost. On the down side are the facts of increased workload in Medical Logistics, and Logistics Officers with limited warrants must know the law and understand their limitations.

-It is a way to go, but not the only alternative. It does put experienced people making their own buys. There will be opposition from those people who do not want to give up contracting authority. Perhaps it will be because they foresee a loss of personnel.

-Issuing purchase orders, BPA's and keeping purchasing records in compliance with Federal Regulation will bring you an additional administrative burden. It will bring you oversight by all the various agencies interested in how we spend tax dollars. In short, it will give you authority and responsibility accompanied by the undesirables such as more paperwork, oversight and worst of all, criticism from the Congress or public for your large and small mistakes.

-Yes, we practically act as procurement officers now in buying priority items. We have to provide them a source. The only thing they do is sign the DD 1155.

- No, the Medical Logistics Officer lacks the proper training and experience in contracting. Many buyers in Contracting have many years of experience and still do not have a warrant, granting a contracting warrant to a MSC is a slap in the face to these people. I doubt that the MSC would like it if a Contracting person went to a brief course and was then authorized to wear the MSC pin. Contracting people have to work hard and long in order to earn a warrant. I don't think granting one in such a capricious manner is right.

- Yes, Medical Logistics has its own source of money that does not affect the rest of the base. They also have their own receiving facility, and can act as a miniature base supply function. With the proper training, there is no reason this cannot work.

-Yes, it will save time and money. We can get the items we need faster and carry less inventory. It will also cut down the amount of paperwork.

Question restated: In light of these responses, do you think the limited warrant is a viable solution?

3. What do you see as the major problems the medical logistics officer will encounter under this program?

Responses:

-The main areas of problem will be knowledge of the law, both administrative, to include contractual action and claims, and those related to the mechanics of acting as a buyer. The narrow perspective that the Medical Logistics Officer comes from, and the potential for the development of "sweetheart" deals.

-Time. There just is not enough time to make all the purchases with the staff and automation we now have.

- Mistakes will happen. The Med Log officer will need to work closely with the Contracting officer. There is a potential for abuse because pressure may be put on the Med Log officer to buy items which might not be appropriate. When this happens the Med Log officer will have to rely on his integrity.

-The administrative workload will increase. We already earn more manpower positions than we have funded, and this would make it worse. Learning the contracting jargon, I think that will cause as many problems as doing the buys incorrectly. We need to be able to talk intelligently to the "experts", the people who could be our greatest critics.

-Overcoming the parochial attitude in Contracting is going to be the hardest part. The Contracting officer knows that the Med Log officer can buy the items faster and better than his own people.

- Who would the MSC Contracting officer work for? You realize that both in government and private sector, the functions of requisitioning, purchasing, receiving, and paying are generally separated. This is done to preserve fiscal integrity, yet MSC warrants would combine all these functions except for paying. Given the chain of command structure of the typical MSC, will the MSC give first loyalty to his warrant or to his boss should the interest of the two conflict?

- Accountability. Who is the Med Log officer really responsible? The low dollar amount, and the relatively small number of purchases being made does not make me believe that this will be too big a problem.

-These streamlining programs have their own set of problems. First, it is labor intensive due primarily to documentation requirements. We are in effect assuming contracting workload to streamline the contracting process.

-The lack of a shared data base. It does not make sense for us to develop our own. Contracting is very concerned how our sharing their data will affect their procurement lead times.

-Med Log has to think about building their own database. When they think about implementing this program elsewhere they should take into consideration the time it takes to build the data base and allow this period as lead time.

-Contracting's concern is that the power will be misused. The problems I foresee will be the Med Log officer buying something that he shouldn't or buying it incorrectly. Perhaps entering into a contractual agreement illegally.

Restated Question: In light of these responses, what do you see as the major problems the medical logistics officer will encounter under this program?

4. What type of training do you think the Med Log officer should receive?

Responses-

- Perhaps the full blown Contracting course would be good. It would make the Med Log officer fully trained. It would be difficult to arrange the time, but perhaps it could be done between PCS moves. If not, then perhaps a short course would be the best alternative. I think it would be best if there were a specialized group that taught the course, perhaps from command-level.

-We do not think the full blown course at Lowry is required due to the level of the warrant. A half day session for the big picture, then sending a buyer from Contracting over to Med Logistics for 5 days to show them the details of the system, and then follow-up training.

-There is a definite need for formalized or standard training prior to granting MSC officer limited contracting warrants. Technical school would probably be the ideal method but not cost effective or realistic. From the realistic standpoint we feel that the best training program would be one that is standard but taught through the base contracting office.

-I think the course at Lowry is probably too extensive. I think the course could be taught on base by the Contracting office. I feel the length should be approximately two afternoons a week for a month. This would allow the Med Log officer and his people to review any pertinent items, and absorb the material over a longer period of time. By having the Contracting Officer teach it, you also would have material relevant to that particular base.

-Work with the buyers for a six month period and then attend a formal tech school similar to the one established at Lowry (AFB). The Contracting office on base should not teach this course simply because they do not have enough time to do this.

-A week of training is plenty. At most a 2 week course locally taught. The Lowry (AFB) course is too detailed for our needs.

-I think they need to understand the legalities involved, and get a good solid background into contracting procedures. I would suggest they put a Contracting buyer in the Med Log office for 2 or 3 runs to monitor the initial buys. As far as an internship goes, I would go along with it as long as it were limited to medical purchases. The course at Lowry (AFB) would be ideal, but I don't expect they could afford to do this.

-I think a short course of a week would be sufficient. The course at Lowry (AFB) is not necessary. The subjects I would like to see covered would include: competition, the tenants of PL 95-507, the concept of pricing, what is fair and reasonable, fundamentals of contract law, mechanism of the DD 1155, what a protest is, and what to do if one is filed.

- I'm not sure what classes are needed. I know the small purchases sections of the FAR would need to be covered thoroughly. I would like some sort of formalized, standardized training, simply because of things like protests. How do we certify that we are qualified to make a purchase. I don't think we need to go to the course at Lowry (AFB). I think the person who has the warrant should have as much knowledge as the new buyer at Contracting. Perhaps an internship of 4-8 weeks at Contracting, but this would impact our manning.

-The Contracting office should provide the initial training. I don't think it needs to be the full scale training that our full time contracting people attend. The training should include: rotating sources, ethical standards, implications of 95-507, and documentation.

Question restated: In light of these responses, what type of training do you think the Med Log officer should receive?

5. What type of equipment is needed to make this experiment workable?
Responses:

-A programable typewriter is sufficient for typing the DD 1155's, the problem is the data base, we need some way to share Contracting's data base.

-At lease a Z-100 microcomputer and an interface with Contracting's data base.

- As a minimum a Z-100 microcomputer. I do not think an electronic typewriter would be sufficient. I support the use of a temporary overhire if the local budget would support it. As a minimum, the office will need to designate one person to be responsible for keeping track of the program.

-A microcomputer, and high speed printer. I think Contracting would be interested in having us on line to place the orders, so a modem. The microcomputer would be necessary to do our other work, and to build vendor files.

- A Z-100 microcomputer would be nice, but I can't say it would be absolutely necessary. You would definitely need a Class-A telephone line. With a modem you would be able to tie into the BCAS system when it comes on line to do your own follow-ups and monitor the status of an order.

-I really don't see any reason why Med Log should not be on line to make their buys. If they were given dedicated access time, and limits on their access, I don't see a problem. A microcomputer would certainly be advantageous. I can't say it is an absolute necessity, but it would speed things up considerably.

-You have to have automation. It won't work with just electronic typewriters, not because preparing the 1155's is so difficult or lengthy, but because of the need to develop the data base. A Z-100 microcomputer with a 10 or 20 MgB hard disk is appropriate.

-A Z-100 microcomputer with on-line capabilities. An electronic typewriter is just not sufficient.

Question restated: In light of these responses, what type of equipment is needed to make this experiment workable?

Appendix B: Delphi Responses

1. Is there a problem in Medical small purchasing?

Harsanyi-Yes. We view the problem differently, Contracting from the workload standpoint and the customer from the order to receipt time.

McChesney-There is a problem in purchasing but it is not unique to medical items. We are hamstrung by regulation from Congress that slows the process. Most of these regulations are necessary because we are spending the public's money, and they want accountability. Unfortunately this all works to slow service on all commodities.

Evans-Yes. The contract lead time is much too long and the medical buyer in contracting generally does not know the item being bought. There has to be a better way to buy small purchases.

Hill-Yes. Medical buying is very different from other base functions, and while there are public laws which must be adhered to, the medical buyer in the Base Contracting office is not fully aware or "sensitive" to these unique needs. Most Base Contracting activities cannot adequately support medical supply/equipment acquisition needs thus necessitating the limited warrant program

Taylor- The only problem I see is in the area of priority purchases. Sometimes it takes too long.

Baldwin-Yes. Contracting can't get the item to us in a reasonable time. Ordering direct from the manufacturer has saved us time and money.

Mantz-No. If medical personnel would process their requirements in a timely manner and establish stock levels, the Contracting division then could establish requirements controls, and other methods for timely support.

Pierre- Yes. Inflated ""priority" rate is a continuing problem, also the lack of good commercial descriptions. Increased use of depot could establish a better more uniform flow of medicines. Blanket approval to purchase direct from large businesses without competition would be a definite plus for all concerned.

Groce-No. The medical buyer at March is not the least experienced. Great pains are taken to be sure that turnover of personnel does not affect the Hospital because of their mission. Workload is heavy all over the Air Force. The Hospital sets their own priority rates which determine lead times. The Hospital is given a lot of freedom to determine the exact item needed.

Gruendell-Yes, a serious problem in small purchasing. Contracting is not responsive enough. Lead times too long. 70 - 90 day lead time on new items too long.

Crabtree-No

Rep-Yes. The problem may be alleviated by recent initiatives in SAC with the limited warrant.

Delaney-Yes, the volume of actions and inexperience of supply buyers and lack of knowledge of the medical nature of the requirement

2. Do you think the limited warrant is a viable solution?

Harsanyi-After reviewing the responses, two things become clear. Contracting is not eager to pass the authority and we are a bit too eager to accept the additional workload. As mentioned in our first response, decentralizing the medical buyer is probably a more workable solution.

McChesney-Perhaps it may help. Worth a try.

Evans-The limited warrant is the best of the alternative methods in dealing with the medical supply small purchase problem. As long as the warrant is limited to under \$1000, training is minimal and little acquisition difficulty experienced.

Hill-Yes. However, the medical logistics officer should not use the limited warrant to circumvent already established purchasing procedures... I feel that when appropriately used, the limited warrant program is an excellent supplement to the procurement system.

Taylor-Yes. By allowing the Logistics officer a limited warrant, his section could make the priority purchases much quicker than Base Contracting.

Baldwin-The limited warrant is the best alternative. The only drawback is the increased administrative requirements. To make the program work we need at least two people assigned. We will never be able to buy all requirements under \$500 at a facility this size(120 bed). I feel our buying "Priorities" will have a ripple effect. It will reduce Contracting's workload letting them work on the routine items.

Mantz-No, I have seen this done in the past and it caused more problems and its just one more area to monitor for violations of law and fraud.

Pierre- It could be if the personnel are properly trained to avoid illegal acts. Education in buying practices is essential and some type of automated system must be developed.

Groce-Yes, if used on Priority items only, it will expedite service to the Hospital and reduce a high priority rate at the base level.

Gruendell-There are other methods to accomplish our requisitioning; decentralized BPA's, and BDO's, petty cash, base contracting, and limited

warrants. Each has its advantages and disadvantages. Limited warrants eventually will become an accepted part of medical logistics.

Crabtree-No

Rep-Most assuredly.

Delaney-Yes, with appropriate contracting office assistance and oversight.

3. What do you see as the major problem the medical logistics officer will encounter under this program?

Harsanyi-We do not see a problem with lines of authority as outlined in other responses. We know of very few hospitals in the private sector who do not have responsibility for requisitioning, purchasing, receiving, and paying. However, we are not familiar with many contracting officers who buy everything from drugs to generators in the private sector.

McChesney- Stay with original response ("Who will the MSC Contracting officer work for? You realize that both in government and private sector, the functions of requisitioning, purchasing, receiving, and paying are generally separated. This is done to preserve fiscal integrity, yet MSC warrants would combine all these functions except for paying. Given the chain of command structure of the typical MSC, will the MSC give first loyalty to his warrant or to his boss should the interest of the two conflict")

Evans-Resistance to change is the major problem. After that is overcome the rest will fall in place. Training of the Med Log Officer would not be a problem.

Hill- Adequate training to become properly acquainted with the "do's" and "don'ts" of the procurement process.

Taylor-Having adequate personnel to place orders, plus establishing a data base.

Baldwin- Time, workload, lack of automation are the drawbacks.

Mantz- Keeping up with the workload, determining pricing fair and reasonableness, and saying no to the boss' pressure.

Pierre- Lack of manpower, along with a lack of an automated system. Development of adequate controls to insure compliance with FAR must be of primary concern. Education of the medical logistics officer and his buyer is paramount. Perhaps a two month training of all medical logistics personnel would reveal many of the problems and processes.

Groce-Several - he will have to become familiar with Contracting laws and regulation; workload will increase; no adequate way to control/monitor Hospital purchasing to ensure compliance with regulations.

Gruendell- The major obstacle will be the lack of confidence contracting people have in us. Unless we learn how to do it well, we will merit their lack of confidence.

Crabtree-(referenced responses 1,3, and 11 in Delphi letter) Lack of knowledge of law, both administrative and mechanics. Narrow perspective of medical logistics and potential for "sweetheart" deals(this was his original response)..pressure from med log officer's boss to buy inappropriate items...exceeding warrant and entering illegal agreement.

Rep-Legality is the paramount issue here

Delaney- Accountability and learning the purchase system

4. What type of training do you think the Med Log Officer should receive?

Harsanyi- I think the other responses support the need for standardized training. However, as stated previously, the best training course would be conducted at base level.

McChesney- Stay with original response (In his original response training was treated as a secondary issue which would be addressed based on the success of the experiment at March AFB)

Evans- The course at Lowry is too expensive. Specialized training could be arranged by MAJCOM or base. I would envision no more than two weeks with emphasis on small business, competition, fair & reasonableness of price, rotation of sources, standards of conduct and file documentation.

Hill- A good short course which encompasses all appropriate aspects of effectively managing a limited warrant program (i.e., contract law, FAR, and small business issues)

Taylor- A week of training at base level.

Baldwin- Limited training. We are not doing any formal contracting. In a few days a local course could be taught to medical logistics (personnel).

Mantz- One day training with follow on if needed.

Pierre- The base level contracting course and two to six months as a buyer in the Base Contracting Office.

Groce- Because of his responsibility as a Contracting officer, he would need an overview course of supply buying in addition to working with a supply buyer.

Gruendell- Just as much as a new buyer in Contracting is given plus several months OJT with base contracting.

Crabtree- OJT and formal training (no clarification on length provided)

Rep- My position on this is not very strong. Take whatever we can get.

Delaney- Local BCO given, small purchase procedures, approximately 30 hours worth at most.

5. What type of equipment is needed to make this experiment workable?

Harsanyi- When MMMS-OL (the on-line medical logistics management system, due to be put into service during FY '87. First installation due in July '86), it will include all the capability required to make the experiment work. Until that time, word processing equipment or microcomputers should suffice.

McChesney- microcomputer

Evans- Whatever equipment is needed for a contracting buyer is required by a Med Log contracting officer. As a minimum a Z-100 microcomputer with modem. The data base can be quickly accumulated from new medical buys. I do not see it that important that Contracting's data base be shared.

Hill- A microcomputer is a must.

Taylor- At least a Z-100 microcomputer with a 20 MgB hard disk. The Logistics officer should be given ample time to load up the data from the item and vendor listings at Base Contracting.

Baldwin- Letting us run items through CIAPS would be the best. Now we are using a micro and a typewriter. The micro is printing out the DD 1155's.

Mantz- That would be the choice of the medical personnel.

Pierre- A Z-248 microcomputer and access to Base Contracting data base.

Groce- Some type of a data base to track previous purchases, vendor data and history, government contracts, purchase orders, etc.. A memory

typewriter is not nearly sufficient. A good Z-100 program would probably be able to handle the level of data (including the printing of the DD Form 1155)

Gruendell- We need microcomputers and high speed printers. Also, must be linked to contracting.

Crabtree- At least a Z-100.

Rep- Z-100

Delaney- Microcomputer, modem, tied into BCAS.

Appendix C: Training Outline

This guide is designed for use in conjunction with the limited contract warrant program. This material is taken from training guides developed at March AFB, the ALMC course Defense Small Purchasing, and the NCMA text Small Purchases. The material is divided by subject rather than by teaching time or day. Each orientation should cover approximately two days of classroom time.

I. General Background

A. Contracting Authority

1. Structure of Federal government

- a. Legislative Branch- make laws**
- b. Judicial Branch- interpret laws**
- c. Executive Branch- carry out laws**

2. Contract authority given to Head of Agency by statute. (10 United States Code (USC) 2304(a)), chapter 137, title 10)

3. This authority is delegated again to "heads of contract activities" who delegate them to the contracting officers.

4. This authority is given in the form of a warrant.

a. include name, period of appointment, and dollar limitation of the warrant.

b. the limited warrant is given by Contracting Authority at Command Headquarters to the Medical Logistics Officer for purchases under \$500.

B. Contracting Officer Responsibilities

- 1. Act as agent of the government**
 - a. can only act within given authority**
 - b. enters into contracts**
 - c. modifies existing contracts**
 - d. terminates contracts**

C. History of Contracting

- 1. Revolutionary times**
 - a. 1775 Second Continental Congress**
 - b. 1778 commissaire- fixed salary and percentage**
- 2. 1800's**
 - a. 1809 first federal statute requiring advertising for bids**
 - b. 1831 US vs. Tingey- idea of agents**
 - c. 1842 Stationery and Printing regulations requires:**
 - 1. advertising for bids once a week for at least 4 weeks in newspaper where work will be performed**
 - 2. description of required supplies or services in the advertisement**
 - 3. sealed bids opened under the direction of the procurement officer in the presence of at least two persons**
 - 4. award to the low bidder, provided he could furnish security for the Government in the case of default.**
 - d. 1898 Kihlberg vs. US- delegation of authority to agent**
- 3. World War II- Present**
 - a. War Powers act**
 - b. Post-war Navy study and recommendations**

c. 1947 ASPA

d. ASPR

e. DAR

f. FAR

II. Policy and Procedure

A. Forms of contracts

1. unilateral

2. bilateral

B. PL 95-507 Small Business

1. all goods under \$10,000 will be bought from a small business unless the contracting officer is unable to obtain offers from two or more small business concerns which are competitive in terms of price, quality and delivery.

2. If only one small business makes a bid the buyer must determine if that price is fair and reasonable.

a. For items under \$1000 only one quotation is necessary if the buyer determines it to be fair and reasonable.

3. If no small business can provide the item it can be bought from a large business, but the contract file must be annotated regarding circumstances.

C. Fair and Reasonable determinations

1. Limited warrant purchases need only be concerned with price competition .

2. Price competition exists when:

a. at least two responsible offerors

b. who can satisfy the purchaser's (the Government") requirements

c. independently contend for a contract to be awarded to the responsive and responsible offeror submitting the lowest evaluated price

d. by submitting priced offers responsive to the expressed requirements of the solicitation.

3. These prices may be judged reasonable in:

a. comparison with current or recent prices for the same or substantially the same item bought in comparable quantities under other contracts.

b. cases where prices are based on published catalog prices. This can include catalog, price list, schedule or other form that is regularly maintained by the manufacturer to the general public.

c. an established price is a current price offered by the seller to buyers.

d. a commercial item is an item of supply of a type which can be used for purposes other than the Government's.

e. fair and reasonable does not always mean the lowest price available. Socio-economic factors may cause purchase from other than lowest price bidder.

example:

Quotation for electronic parts

Stan's Electronic's	\$750
Bob's Air Conditioning	No Bid
Joe's Plumbing	No Bid

(Does not reflect adequate competition or price competition. Air Conditioning and Plumbing shops don't usually carry electronics)

Quotation for a furnace

Frank's Air conditioning	No Bid
Carrier Air Conditioning	No Bid
Joe's Air Conditioning	\$510

(Shows adequate competition but not adequate price competition)

Quotation for electronic parts

Stan's Electronics	\$750
Jones Electronics	\$250
Bob's Electronics	\$1400

(Shows adequate competition but does not show adequate price competition. Price variance is too great. Buyer should be sure all firms bid on the same item in like quantity)

Quotation for Electronics Parts

Stan's Electronics	\$750
Joe's Electronics	\$800
Bob's Electronics	\$778

(Shows adequate competition and price competition)

5. Rotating sources

a. to promote competition

b. distribute government business throughout the community.

6. Written telecommunicated purchase orders used when:

a. use must be advantageous to the government
b. the unsigned transmitted order must be acceptable to the supplier.

c. the contracting officer must approve the information.

(this can be the individual holding the limited warrant)

d. this method is always a unilateral contract

e. the ordering office (medical logistics) retains all contract administration

III. Laws and Statutes of Interest

A. 95-507 Small Business Set Aside(see above)

1. Section 8(a)

B. Competition in Contracting Act (CICA)

1. for purchases under \$1000 it is only necessary to support this competition wherever practical rather than comply with all of the CICA provisions.

C. Federal Acquisition Regulation (FAR)

1. especially chapter 13

D. FAR supplements

E. Command Supplements

F. Base Supplements

IV. Forms Used

A. DD 1155 can be used to form:

- 1. Unilateral contract**
- 2. Bilateral contract**
- 3. Request for quotations**
- 4. Purchase order**
- 5. Other uses include: BPA and BDO's**

*******note: ALMC Defense Small Purchase Correspondence Course has an excellent step by step procedure for filling out DD Form 1155. pages 140-142.*******

B. Locally devised quotation forms

V. Other Areas of Concern

A. Protests

- 1. When vendor not selected files a written protest with the contracting officer; in this case the medical logistics officer.**
- 2. Medical logistics officer's responsibility**
- 3. Judge Advocate General's role**
- 4. Base contracting officer's role**

B. Unauthorized Purchases

- 1. If company representative accepts an order from an unauthorized agent, such as a physician, for an item, the government can tell the company it will not honor this invoice. Companies doing business with**

the Government are supposed to ensure they are dealing with authorized agents. NOTE- this line of defense has not been very successful.

2. The individual responsible for the unauthorized purchase can be held responsible for payment. This would be, using the physician again, when the unauthorized purchase was not to the benefit of the government, the doctor could be made to pay for the item.

3. Ratifications

a. When someone other than the individual authorized to obligate the government does so.

b. When the limits of the warrant are exceeded, the act can be ratified by higher authority (base contracting officer)

C. AFR 30-30

D. DoD Directive 5500.7

1. gratuities - items over \$5 in value
2. Prohibited selling by retired officers
3. soliciting or accepting gifts or favors

Bibliography

1. Air Force Medical Materiel Field Office. GETTING STARTED IN MEDICAL LOGISTICS. Ft. Detrick MD, August 1983.
2. Akuff, Captain David, Instructor, Health Services Administration, School of Health Care Sciences. Telephone Interview. Sheppard Air Force Base TX, 22 January 1986.
3. Baldwin, Captain Hal, Director, Medical Logistics. Personal Interview. USAF Regional Hospital March, March AFB CA, 20-21 March 1986.
4. Base Contracting Activity Report. Productivity Summary. Maxwell AFB AL. December 85-February 1986.
5. Branch, MSgt. Russell, NCOIC Medical Logistics, USAF Hospital Maxwell. Telephone interview. Maxwell AFB AL, 9 April 1986.
6. Cash, James I. Jr., Benn R. Konsynski. "IS Redraws Competitive Boundaries". Harvard Business Review, 63: 134-142. (March-April 1985).
7. Command Contracting Activity Report. Part 1: Procurement Workload (Cumulative). Air Force Logistics Command. Wright-Patterson AFB OH, 30 September 1985.
8. Command Contracting Activity Report, RCS HAF-RDC 7106. Air Force Logistics Command, Wright-Patterson AFB OH, October 1985.
9. COPPER 90 A PLAN FOR AIR FORCE BASE-LEVEL CONTRACTING FOR THE 1990'S, AFLMC Project LC 830105, Air Force Logistics Management Center, Gunter AFS AL, December 1984.
10. Couyette, Sgt. Lynda R., NCOIC Local Purchase, Medical Logistics. Personal interview. USAF Regional Hospital March, March AFB CA, 21 March 1986.

11. Cox, SMSgt. Thomas R., Superintendent, Medical Logistics. Personal interview. USAF Regional Hospital March, March AFB CA, 21 March 1986.
12. Crabtree, Claude, Chief Services Branch, Wright-Patterson Contracting Center. Personal interview. Wright-Patterson AFB OH, 6 February 1986.
13. Culver, C. M., "Federal Government Procurement - An Uncharted Course Through Turbulent Waters: Part 1. From Colonial Times to World War I", Contract Management, 24: 4-7,32, (May 1984).
14. Dalkey, Norman C., The Delphi Method: An Experimental Study of Group Opinion, Santa Monica, CA: The RAND Corporation, June 1969.
15. Delaney, Lt Col Gary, Course Director, Contracting & Manufacturing Option, Air Force Institute of Technology (AU). Personal Interview. Wright-Patterson AFB OH, 11 March 1986.
16. Department of the Air Force, Base Level Contracting, 3400th Technical Training Wing, Lowry AFB CO, May 1985.
17. -----, AFM 67-1 Volume V, USAF Supply Manual. HQ USAF. Government Printing Office, Washington DC, 1 October 1985.
18. -----, AFM 167-230 (DRAFT), Medical Materiel Management System: I008/AJ, HQ USAF. Government Printing Office, Washington DC, 1 July 1986.
19. -----, AFM 167-240, HQ USAF. Government Printing Office, Washington DC, 1 October 1982.
20. -----, AFR 168-4, HQ USAF. Government Printing Office, Washington DC, 9 August 1982.
21. Department of the Army, Defense Small Purchasing Correspondence Course, ALM-33-5930-LB(J), United States Army Logistics Management Center, Ft. Lee VA, July 1985.
22. Emory, C. William. Business Research Methods. Homewood IL: Richard Irwin Inc, 1985.

23. Evans, William, Associate Director, Small and Disadvantaged Business Utilization, Strategic Air Command, Personal interview. HQ SAC, Offutt AFB NE, 20-21 February 1986.
24. Federal Acquisition Regulation, Government Printing Office, Washington DC, 1 April 1984.
25. Ficken, Captain Earl I., and Motlong, Lieutenant Wendy L., An Evaluation Of The Requirements For Qualification And Warranting Of Administrative Contracting Officers, MS thesis, School of Systems and Logistics, Air Force Institute of Technology (AU), Wright-Patterson AFB OH, 1984.
26. Gaither, Norman, Production and Operations Management; Second Edition, Chicago: Dryden Press, 1984.
27. Government Contract Law Volume I, School of Systems and Logistics, Air Force Institute of Technology, Wright-Patterson AFB OH, 1968.
28. Grace, J. Peter, Chairman, "President's Private Sector Survey on Cost Control." Government Printing Office, Washington DC, 16 January 1984.
29. Groce, Lieutenant Lydia, Chief, Systems Management Branch. 22 AREFW Contracting, Personal interview. March AFB CA, 20-21 March 1986.
30. Gruendell, Major Ronald, Director, Medical Logistics Management, Medical Center Wright-Patterson, Personal interview. Wright-Patterson AFB OH, 27 February 1986.
31. Hall, Harry G., Deputy Director of Contracting, SAC HQ. Personal correspondence sent to 22 AREFW/LGC March AFB CA, 12 March 1986.
32. Hamman, Lieutenant Margaret Eastlund, An Analysis Of The Implementation Of Policy And Control Of Small Purchases Of \$250 Or Less, MS thesis, Naval Postgraduate School, Monterey CA, June 1975.
33. Hanes, Chisman, and Smith, Sherwood B. Jr., "The Contracting Officer; His Authority to Act and His Duty to Act Independently", Yearbook of

Procurement Articles Volume 3, pgs 3-25, Federal Publications,
Washington DC, 1967.

34. Harsanyi, Colonel Charles A., Chief, Medical Logistics Division, Directorate of Health Care Support, Office of the Surgeon General. Personal correspondence. Brooks AFB TX, 31 January 1986.
35. Headquarters SAC/SGAL. Correspondence. "October Acquisition Test Program". Captain Oral Compson, Director, Medical Logistics Management, USAF Hospital Pease, Pease AFB NH, 18 Nov 1985.
36. Hill, Captain William, Chief, Medical Logistics, Strategic Air Command. Personal interview. HQ SAC, Offutt AFB NE, 20-21 February 1986.
37. Holland, Jim, Air Force Medical Logistics Office. Telephone interview. Ft. Detrick MD, 4 March 1986.
38. Huff, Lieutenant Commander Kurt R. and Bales, Lieutenant Commander Randle D., Professional, Organizational, and Training Weaknesses In Small Purchase Within The Department Of The Navy, MS thesis, Naval Postgraduate School, Monterey CA, June 1984.
39. Ivanisvek, Major Robert J., Increased Contracting Professionalism Standards for Contracting Officers, Research project, Air Command and Staff College (AU), Maxwell AFB AL, 1984.
40. Keller, Major Harris. Chief, Pacer Quiet Management Division, Director of Tanker Systems, ASD/AFYL. Personal interview. Wright-Patterson AFB OH, 22 May 1986.
41. Local Purchase Receipt Percentage Report (Summary). Provided by Capt. William Hill, Director, Medical Logistics. HQ SAC, Offutt AFB NE, 20 February 1986.
42. Mahoy, James O., Government Contract Law Cases 4th Edition. School of Systems and Logistics, Air Force Institute of Technology (AU), Wright-Patterson AFB OH, 1983.
43. Mantz, Donald, Deputy Chief of Contracting. 22 AREFW Contracting. Personal interview. March AFB CA, 20-21 March 1986.

44. McChesney, Colonel Jack L., Chief, Contract Placement Division, Directorate, Contracting & Manufacturing Policy. Personal correspondence. HQ USAF, Washington DC, 11 February 1986.
45. Mellott, Ken, Procurement Analyst, Air Force Logistics Command. Personal interview. Wright-Patterson AFB OH, 29 May 1986.
46. Miles, Colonel R.A., Director of Contracting, Strategic Air Command, Personal correspondence to 22 AREFW/LGC, USAF Regional Hospital March AFB, 5 April 1985.
47. -----, Personal correspondence to 22 AREFW/LGC and USAF Regional Hospital March AFB CA/SGA/SGAL, 24 June 1985.
48. -----, Personal correspondence to 22 AREFW/LGC and USAF Regional Hospital March AFB CA/SGA/SGAL, 29 October 1985.
49. -----, Personal correspondence to 22 AREFW/LGC and USAF Regional Hospital March AFB CA/SGA/SGAL, 29 January 1986.
50. Office of Procurement Policy, Office of Management and Budget, Final Report on Simplification of Small Purchases, prepared by Task Group No. 5, Washington DC, March 1984.
51. -----, Guidance on Establishing Procurement Career Management Programs, prepared by Task Group No. 6, Washington DC, May 1985.
52. Naisbitt, John, MEGATRENDS, pgs 99-129, New York: Warner Books, 1982.
53. National Contract Management Association. Small Purchases. Active Procurement Program Library. McLean Virginia, 1983.
54. Pierre, Mr. Donald, Chief of Supply Branch. Personal Interview. 22 AREFW Contracting, March AFB CA, 20-21 March 1986.
55. Prejean, SMSgt Joe D., OPR: DSDO/SGYM. Telephone Interview. Gunter AFS AL, 2 June 1986.

56. Pursch, William C., PhD. Chairman, Contract Management Department, Air Force Institute of Technology (AU). Personal Interview. Wright-Patterson AFB OH, 26 June 1986.
57. Rep, Major Gerald T., Director, Medical Logistics and Services, Air Force Logistics Command. Personal interview. Wright-Patterson AFB OH, 14 March 1986.
58. Roberts, Captain G. Keith, Small Purchases, ML thesis, The National Law Center, George Washington University, Washington DC, January 1982.
59. Strickland, Sue, Systems Division Branch Chief, Wright-Patterson Contracting Center. Telephone interview. Wright-Patterson AFB OH, 23 June 1986.
60. Tardif, Dick, ASAP Program Administrator. AFCPMC/DPCCQ. Telephone interview. Randolph AFB TX, 28 May 1986.
61. Taylor, Captain Carl, Director, Medical Equipment Management Office. Personal interview. USAF Regional Hospital March, March AFB CA, 20-21 March 1986.
62. The Inspector General, TIG Report, FUNCTIONAL MANAGEMENT INSPECTION OF EFFECTIVENESS OF BASE-LEVEL SMALL PURCHASES OF MATERIEL AND SUPPLIES PN 85-615 10 MARCH-20 NOVEMBER 1985, HQ AFISS, Norton AFB CA, 1985.
63. Trollinger, Captain, Military Airlift Command Contracting. Telephone interview. Scott AFB, IL , 5 June 1986.
64. USAF Almanac 1986, AIR FORCE, 69: 183 (May 1986).
65. U.S. Congress, House of Representatives, Before the Investigations Subcommittee of the House Committee on Armed Services, July 1984.
66. U.S. Congress, Senate, Committee on Government Operations, Subcommittee on Investigations. Hearings on Fraud and Corruption in Management of Military Club Systems. Hearings, 91st Congress, 1st Session, 1969. Washington DC, Government Printing Office, 1969.

VITA

Captain Marc M. Sager was born on 20 October 1951 in St. Louis, Missouri. He moved to Highland Park, Illinois in 1955 and attended school there. He graduated from Highland Park High School in 1969, and Northern Illinois University in 1973 with a degree in Education. From 1973 through 1975 he was a Peace Corps Volunteer on the island of Yap in the Western Caroline Islands. In 1980 Captain Sager received a Master of Science degree from Central Michigan University in Management and Supervision. He entered the Air Force in 1981 through the direct commissioning program into the Medical Service Corps. He served as Director, Medical Logistics Management from 1981-1984, and Director, Medical Resource Management from 1984-1985 at USAF Hospital McConnell, McConnell AFB KS. He entered the School of Systems and Logistics, Air Force Institute of Technology, in May 1985.

Permanent address: P.O. Box 753

Gilbert, Minnesota 55741



UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE

ADA174495

REPORT DOCUMENTATION PAGE

1a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED			1b. RESTRICTIVE MARKINGS		
2a. SECURITY CLASSIFICATION AUTHORITY			3. DISTRIBUTION/AVAILABILITY OF REPORT Approved for public release; distribution unlimited.		
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE					
4. PERFORMING ORGANIZATION REPORT NUMBER(S) AFIT/GLM/LSM/86S-70			5. MONITORING ORGANIZATION REPORT NUMBER(S)		
6a. NAME OF PERFORMING ORGANIZATION School of Systems and Logistics		6b. OFFICE SYMBOL (If applicable) AFIT/LSM		7a. NAME OF MONITORING ORGANIZATION	
6c. ADDRESS (City, State and ZIP Code) Air Force Institute of Technology Wright-Patterson AFB, Ohio 45433 -6583			7b. ADDRESS (City, State and ZIP Code)		
8a. NAME OF FUNDING/SPONSORING ORGANIZATION		8b. OFFICE SYMBOL (If applicable)		9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER	
8c. ADDRESS (City, State and ZIP Code)			10. SOURCE OF FUNDING NOS.		
			PROGRAM ELEMENT NO.		
			PROJECT NO.		
			TASK NO.		
			WORK UNIT NO.		
11. TITLE (Include Security Classification) See Box 19					
12. PERSONAL AUTHOR(S) Marc M. Sager, B.S., M.S., Capt, MSC, USAF					
13a. TYPE OF REPORT		13b. TIME COVERED FROM _____ TO _____		14. DATE OF REPORT (Yr., Mo., Day) 1986 September	
				15. PAGE COUNT 129	
16. SUPPLEMENTARY NOTATION					
17. COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)		
FIELD	GROUP	SUB. GR.			
32	06	3	Procurement, Government Procurement, Medical Military Procurement		
19. ABSTRACT (Continue on reverse if necessary and identify by block number)					
Title: AN EVALUATION OF THE LIMITED CONTRACT WARRANT EXPERIMENT AT MARCH AFB					
Thesis Chairman: John A. Campbell, Major, USAF Assistant Professor of Contracting Management					
Approved for public release: LAW AFR 190-17. 2954781 E. E. WOLFE Director, Research and Professional Development Air Force Institute of Technology (AFIT) Wright-Patterson AFB OH 45433					
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT UNCLASSIFIED/UNLIMITED <input checked="" type="checkbox"/> SAME AS RPT. <input type="checkbox"/> DTIC USERS <input type="checkbox"/>			21. ABSTRACT SECURITY CLASSIFICATION UNCLASSIFIED		
22a. NAME OF RESPONSIBLE INDIVIDUAL John A. Campbell, Major, USAF			22b. TELEPHONE NUMBER (Include Area Code) (513) 255-5402		22c. OFFICE SYMBOL AFIT/LSM

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE

In October 1985 a limited contract warrant was granted to the Director, Medical Logistics Management at March AFB. This warrant was for all purchases under \$500 per order. By granting contracting authority outside the 65XX careerfield, Strategic Air Command was breaking with the traditional method of procuring medical items.

This study used a modified Delphi technique to elicit responses from medical logistics and contracting personnel holding parallel positions from Air Staff to base level. The feasibility and limitations of this experiment are discussed and a suggested training outline for medical personnel participating in limited contract warrants is provided.

With over \$128.7 million spent in the procurement of medical supplies through local purchase procedures in FY '85, and over 40% of all medical items obtained in this manner, there is strong impetus to explore alternatives which may speed up, simplify, or assist the medical treatment facility in obtaining the needed supplies in as timely a manner as possible.

UNCLASSIFIED

END

12-86

DTIC